

ROYAL COMMISSION OF INQUIRY INTO CERTAIN DEATHS AT THE HOSPITAL FOR SICK CHILDREN AND contid RELATED MATTERS.

Hearing held 8th floor 180 Dundas Street West Toronto, Ontario

The Honourable Mr. Justice S.G.M. Grange

P.S.A. Lamek, Q.C.

E.A. Cronk

Thomas Millar

Commissioner

Counsel

Associate Counsel

Administrator

Transcript of evidence for September 7, 1983

VOLUME 29

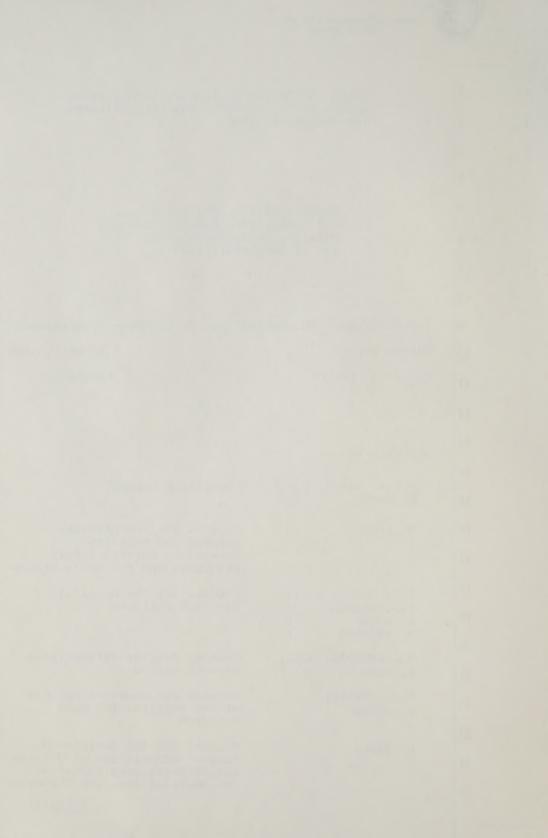
## OFFICIAL COURT REPORTERS

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6	180 Dundas Street West, Toronto, Ontario, on Wednesday, the 7th day of September, 1983.				
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9	THE HONOURABLE MR. JUSTICE S.G.M. GRANGE - Commissioner				
10	THOMAS MILLAR - Administrator				
11	MURRAY R. ELLIOT - Registrar				
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13					
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23	Garage I for the Desistand				
24	B. SYMES Counsel for the Registered Nurses' Association of Ontario and 35 Registered Nurses at				
25	The Hospital for Sick Children				

(Cont'd)



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14		Jordan Hines)
15		
16		
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--- Upon commencing at 10:00 a.m.

THE COMMISSIONER: Yes, Miss Cronk.

DR. ROBERT MARK FREEDOM, Resumed

DIRECT EXAMINATION BY MS. CRONK: (Continued)

Q. Dr. Freedom, you recall when we broke yesterday afternoon we were discussing the mortality and morbidity meetings that had been scheduled and which took place in September of 1980 at the Hospital. I believe you told us that you were in attendance at both of the meetings, the first on September the 5th and the second on September the 26th. In respect of the meeting of September the 5th, Doctor, you will recall that the deaths of the Bilodeau child, the Turner child and the Taylor child were discussed at that meeting.

Can you help us, Dr. Freedom, do you have any recollection as to whether the issue of digoxin intoxication as a potential contributing cause of death in those cases, or as possible explanation for deaths in those cases was raised at that meeting?

A. I don't have any recollection,
Miss Cronk, that digoxin was mentioned for any of
those three children that we reviewed.

Q. Dr. Freedom, one of the

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exhibits that has been admitted before the Commission is a copy of several pages of handwritten notes which we understand to have been made by Nurse Radojewski at the meeting of September 5th, and that is Exhibit 46, Mr. Commissioner.

I can refer you, Dr. Freedom, to page 11 of those notes, if you flip through you will see that one of the pages is numbered at the top right hand side, No. 11.

A. Yes.

 $\Omega$ . And under the name "David Taylor" there appears, half way down an entry ECG ST down, depression? dig.tox.

A. Yes.

Q. I can tell you, Dr. Freedom, that Dr. Rowe during the course of his evidence testified that it was his belief that that reference in Nurse Radojewski's notes pertain to the condition of the child on his admission to the Hospital. Does this note help you or assist you in any way in recalling any discussion at the meeting of September the 5th concerning digoxin intoxication?

A. No. I didn't know that
Miss Radojewski was taking notes, and I certainly
again don't remember any comment about dig. toxicity.



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I do recall, I think we talked about it yesterday,
that when I first saw David Taylor in my office on
Friday afternoon, he was not on cardiac medications
and his electrocardiogram showed rather a severe
ST wave depression, which again I think as we
discussed yesterday together is what I would expect
of some babies with critically severe aortic stenosis

Q. I'm sorry, Dr. Freedom, prior to today had you seen or had an opportunity to review these notes by Miss Radojewski?

A. I had read them, I had read about them in Dr. Rowe's testimony, or perhaps he had mentioned to me did I recall anyone taking notes. I said, no, and he mentioned this had come out in his examination.

O. I take it the discussion took place after the commencement of these proceedings?

A. Yes.

O. And during the course of Dr. Rowe's evidence.

A. Yes, I had no idea that anyone was taking notes.

 $\Omega$ . Dr. Freedom, can you help me, the ST wave depression as you have described to have been reflected in the ECG of David Taylor when you



examined him on admission, is that consistent in your view with what has been described as digoxin effect which on occasion manifest itself in any ECG reading?

A. Yes. I think one could see some of the same ST-T wave segment changes in a youngster on digoxin. Again though I think with reference to David Taylor, these changes were on his cardiogram when I saw him in my office on Friday. I think if I remember I found my page 2 of the letter that was not in the Hospital chart, where I described those changes on his cardiogram on admission.

Q. You are referring now to the reporting letter that we discussed yesterday?

A. Correct.

Q. I take it then, Dr. Freedom, to make sure I understand your evidence, that in your experience it would not be uncommon to consider an ST-Twave depression as being consistent with digoxin effect?

A. Let me just change the focus a little bit of that. If a child was not on digoxin at that time, and I saw these changes, I would be concerned about the state of the heart muscle, the myocardium. If a child was on digoxin at the time of the cardiogram, then I would ask myself is it the



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digoxin, or is it some underlying process of muscle, or both.

0. Digoxin toxicity is at least one of the matters that would come to mind if you saw those depressions on the reading?

Not necessarily, Miss Cronk, in the sense you can see wave segment changes as digoxin effect, not necessarily toxicity.

I understand, Doctor, Doctor, 0. moving then to the next morbidity and mortality meeting that was held on September the 26th, 1980. Once again you will recall that you told us you were present at that meeting and there were series of children whose deaths were discussed: Dion Shrum, Antonio Velasquez and the Monteith child. Once again, Doctor, do you have any recollection of any discussion having taken place at that meeting concerning the possible contribution of digoxin intoxication to the death of those children?

No, I do not.

Can you help me, Doctor, was 0. the death of Brian Gage discussed at that meeting on September the 26th?

> I don't recall. Α.

Fairly, Doctor, I should tell Q.



you that the minutes of the meeting of September the 26th do not recall there was a discussion with respect to Brian Gage, but we know he died the day before on the cardiology wards. My question to you in terms of your attendance at that meeting was whether you raised the death of Brian Gage, or were concerned at that point that his death too should be reviewed at that conference?

A. No, I did not.

marked as an exhibit before the Commission,

Dr. Freedom, with respect to that meeting, indicate
at the conclusion that a further mortality meeting
was to be scheduled. We have heard evidence that
that further meeting was not in fact held until
January the 12th, 1981. In the intervening period
between the 27th of September and January the 11th,
did you personally attend, or were you invited to
attend any further conference at which it was intended
to discuss the deaths of children on Wards 4A/B?

A. I believe, Miss Cronk, we had one cardiovascular pathology conference in October in the routine Monday afternoon session, but it was not of the format, you know, that the September meetings that we have discussed.



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	Ω.	That	cardiovas	scul	lar meeting
was the normal	one that	is	scheduled	in	accordance
with what you	outlined	yest	cerday?		

A. Yes, correct, but I don't remember any other conference being held after that late September conference until the one back in 1981.

Q. We have heard evidence as well, Dr. Freedom, that Dr. Rowe was absent from the City and the Hospital for some period during the fall, and that he was somewhat surprised on his return to discover that a further meeting, or a further conference, had not been held.

Can you help us, Dr. Freedom, do you recall any discussion amongst the staff cardiologists, or more particularly with Dr. Jedeikin after
September the 26th with respect to the necessity or desirability of holding a further meeting that fall?

A. No, I don't recollect any discussion that I had with Dr. Jedeikin, or any of our regular work conferences that we were going to have another one.

Q. Did you in your own mind, Dr. Freedom, having been at the September the 26th meeting, consider it advisable, or did it occur to you that another meeting should be held that fall?



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A. Well, again I know in retro-
spect, I can't place my own comments at that time.
I know when Dr. Rowe got back he had mentioned to
the staff that he wanted to have another one. Again
I think that coloured all of our impressions at that
time.

Q. Doctor, you will recall yesterday we spoke of the child Paul Murphy who died on the cardiology wards in August of 1980. You indicated at that time that you hadn't had an opportunity recently to review the record. Have you now had a chance to do so?

Yes, I did that last evening.

Q. Doctor, as I understand it you were the staff cardiologist on call the night of Paul Murphy's death, is that correct?

Yes.

MS. CRONK: Mr. Commissioner, I don't believe there will be any necessity to refer, unless Dr. Freedom wishes to, to anything other than Volume 3 of the record, you will recall it is a three volume medical record, Exhibit 82.

Doctor, as well, as I understand it you examined the child on the day of his last admission to the Hospital, that was August the 19th,



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is that correct?

A. Correct.

Q. And you made a consultation note of that examination?

A. Correct.

Q. Can we turn to page 132 of Volume 3 of the record, Doctor. Can you help me, is that the consultation note that you made having examined the child on the late afternoon of his admission?

A. Yes.

Q. And if I understand your description of the child's condition at the time, or at least your impression of his condition, and I am reading now from the notes for August the 19th, you were of the view that the child had ---

MR. ORTVED: What page please,

Miss Cronk?

MS. CRONK: I'm sorry, page 132,

Mr. Ortved, Volume 3.

MR. ORTVED: Thank you.

MS. CRONK:  $\Omega$ . You were of the view that the child had tetralogy of Fallot with pulmonary atresia, continuing with right ventricle failure, chronic right heartfailure, edema, he was



cyanosed and clubbed at the time.

I take it, Doctor, that note at the bottom left hand side of the consultation note reflects your intended plan for the child at that stage?

- A. Yes, where I describe the use of vigorous diuretics, neuro consults and home ASA, as soon as possible.
- Q. I take that to mean, Doctor, that it was your hope and intention that the child would be returning home and his hospitalization would not be prolonged at that stage?
- A. Correct. I think we felt that there was no further surgery that we could offer this unfortunate lad. The family had spent considerable time in the Hospital over the summer and we felt that the more time he spent at home the better for the family and for Paul.
- Q. Paul Murphy was a child, if I recall it correctly, Doctor; that had spent the better part of his life in and out of hosiptals as a result of his cardiac problems, is that correct?
  - A Correct.
- $\Omega$ . I see a note as well under August 22nd, 1980, at 3:30 p.m. in your consultation



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note, Doctor, and if I am reading that correctly ---THE COMMISSIONER: What page please? MS. CRONK: I'm sorry, it is the same page, Mr. Commissioner, and the bottom right hand side. THE COMMISSIONER: Oh, yes, thank you. MS. CRONK: Q. If I am reading the note correctly, Doctor, it reads: "Patient well known to Hospital for Sick Children and me. Chronic congestive heart failure. No further ... " Am I reading it right? Α. "...no further surgery." "No further surgery available", Q. and then the notation "no 25". Correct. Α. Q. Do I take that correctly to mean, Dr. Freedom, that no resuscitation order was in place for this child? Yes, as of that date. Doctor, are you familiar with 0. the terminal events experienced by this child on the evening of his death? Yes, I am. Α.

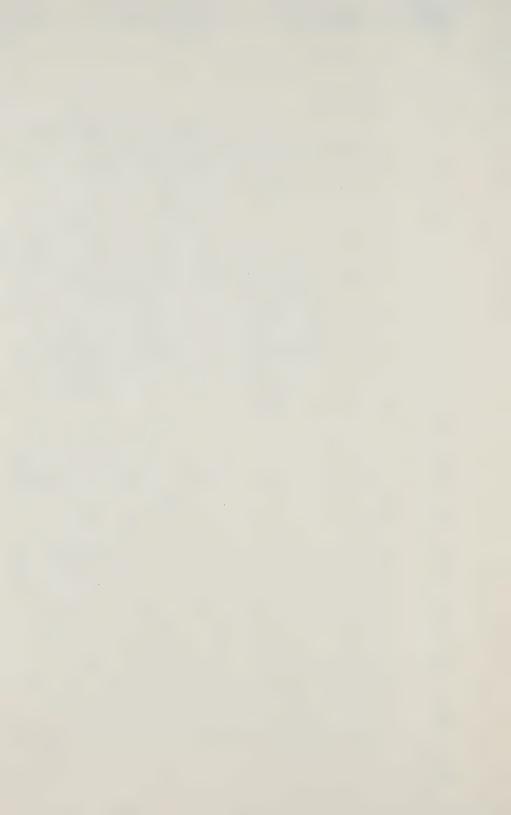


Q. I take it you followed his progress after having seen him on August the 19th when he was admitted to the ward?

A. Correct.

Q. On the basis of your familiarity with his condition, having seen the child both prior to August the 19th and prior hospitalizations, and again on the date of his last admission, and on the 22nd of August, were you able, Doctor, after his death on August 23rd during the early hours of the morning to formulate an opinion as to the probable cause of his death?

as I described in my consultation note, had in-stage irreversible cardiac disease. He had severe impairment of the function of his pumping chamber. He was terribly oedematous, and in the chart on page 205, even the month before, or two months before, he had nearly died in Hospital. He had become unresponsive, and I felt although I hoped he would be home with his family for a few days, I felt that his death was explained by his severe unrelieved congenital heart malformations and intractable heart failure. I also, again Miss Cronk, as I reviewed the chart last night, I see there was a digoxin level of



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1.8 taken four days prior to his death.

Q. It is my understanding,
Doctor, that that is the only digoxin level that
was taken during the period of the last hospitalization of Paul Murphy prior to his death, is that
your understanding as well?

A. Yes. He came in on August the 19th, he died August the 23rd, so he was in the Hospital of four days and had a level on admission.

- Q. of 1.8?
- A. Correct.
- O. Doctor, in your view, were any of the terminal events, or terminal symptoms suffered by this child indicative of digoxin intoxication?
  - A. No.
- Q. Were any of the events indeed consistent in your view with digoxin intoxication?
- A. Well, this lad died, and I guess in view of the evidence that we have all heard that anyone's death is consistent with digoxin. I certainly did not consider it at the time, and seeing the terribly ill state that Paul was in I never would have considered it at the time, especially with a normal level prior to death, having the same type of



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kidney function for those several days prior to his death the BUNs between 25 and 26.

 ${\tt Q.} \qquad \hbox{\tt His BUNs were considerably}$  elevated prior to death?

- A. Correct but --
- Q. I am sorry, Doctor.
- A. But despite being considerably elevated in the mid-twenties he still had a level that was within what I considered a normal therapeutic range.
  - Q. Of BUN?
    - A. No digoxin, for an elevated
- Q. Doctor, may we explore the terminal events a little bit further?
  - A. Yes.
- Q. My understanding of the entries at the time of arrest in the progress notes indicate that the physician, the attending physician, was called to see Paul because of the lack of responsiveness. When he was examined he had no detectable blood pressure, his pulses, heart rate and respirations were similarly undetectable. The nursing note for the same evening indicates --
  - A. I'm sorry, Miss Cronk, what



page are you on?

Q. I'm sorry, Doctor, on page 130 and 131 of the record.

A. Okay.

 $\Omega$ . Do you have it, Doctor?

A. Okay.

Q. The nursing notes will

indicate that the patient had been sitting up in bed, was very confused. He had an involuntary bowel movement. He rolled down and turned to the side and then became unresponsive. Respirations at that time were very shallow and laboured. The blood pressure was hard to obtain. Oxygen was given 40 per cent by mask.

Did you not see in the recording of the terminal events of this child, Dr. Freedom, any evidence of arrhythmias, or irregular heart rate, of heart block, do you agree?

A. Again, I can't tell from this,
Miss Cronk, I can't remember it either. Since there
was no 25 I am not sure Paul was on a monitor at
the time. If he was not on the monitor, then again
you may have other information I don't have. If he
wasn't on a monitor then it is hard to say exactly
what the EKG changes were, you know, towards the last



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few seconds, or few minutes of his life.

- Q. Doctor, as I understand it, you were contacted by the attending physician at the time of this child's arrest and death?
- A. Yes, I was called by my fellow.
- Q. Based on the events that were described to you leading up to his death, and the symptoms of the final arrest itself, was there in your view, Doctor, at the time of his death, any reasonable probability that his death had been associated with or contributed to by digoxin intoxication?
- A. No, I don't think that was a consideration at all.
- Q. Has any information that was subsequently provided well, I should ask you first, Doctor, it is my understanding that no autopsy was performed with respect to this child?
  - A. That is correct.
- Q. Has any information come to light since the date of his death which in your view suggests, or leads to the indication of digoxin intoxication as having played a part in this child's death?



A. No.

THE COMMISSIONER: Before you move to the next one, there is one thing, Doctor, you said that any death - and perhaps I misunderstood you, could be attributed to digoxin. Are there no deaths, no forms of death that you could positively rule out digoxin poisoning?

 $\mbox{ THE WITNESS:} \qquad \mbox{I guess if you were} \\ \mbox{guillotined} \ .$ 

THE COMMISSIONER: You say a person can die of digoxin poisoning without any of the usual symptoms of arrhythmia, sudden onset and all the rest of these things?





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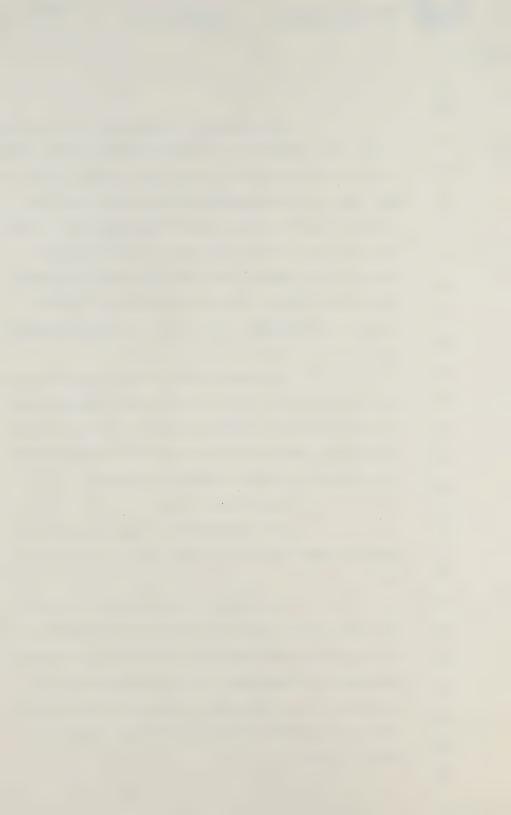
THE WITNESS: I think what I was trying to make, Mr. Commissioner, was the analogy that in the old days syphilis used to mimic every disease known to man. Now, as we are exploring the events over the months of July to March, where, when one dies — where one dies either with bradycardia, one dies with a systole, with absent heart beat, or with ventricular dysrythmias, that could be mimicked by a natural process or by digoxin. So, maybe I am misunderstanding you.

THE COMMISSIONER: Well, you may well be not understanding me but I am not quite understanding this problem, yet. Assuming, and it is a big, large assumption, assuming that the child was administered a large dose, a massive overdose of digoxin.

THE WITNESS: Yes.

THE COMMISSIONER: Would you, under those circumstances, expect him to die in the way he did?

THE WITNESS: I think that a patient with the type of end-stage heart disease that Paul did, if he had been administered a lethal dose of digoxin, advertent or inadvertent, then his death could be consistent with that mode of dying; you know, alive one minute and very quickly rolls over, vomits and dies. I'm not



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sure I am understanding exactly.

MS. CRONK: Q. Well, Doctor --I'm sorry, Mr. Commissioner.

THE COMMISSIONER: No, no. I don't know that anybody who has practiced law all his life could ever complain about an inexact science, but it does strike me as odd that you couldn't rule out digoxin poisoning in any of these children at all.

THE WITNESS: Well, I think, you know, Mr. Commissioner, as I have read, you know, the proceedings of the hearing, we know that the children, as you have heard from Professor Rowe, will die sometimes with fast heart rates or ventricular tachycardia, sometimes with slow heart rates, with bradycardia. We know that digoxin poisoning, advertent or inadvertent, can cause bradycardia in some children or ventricular dysrythmia.

So, if one just takes the basic premise of how one dies, I think ---

ordinary layman's point of view, when someone is poisoned, we expect a sudden reaction. That is what always seems to have happened to people who have been poisoned either by bad fish or bad pork or anything like that. There is a sudden painful reaction and I



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would have thought, and I may be wrong, one would not, ordinarily, from poison, die peacefully. That is what appears to be, if ever there were an instance of a peaceful death, this seems to be it, this one with the Murphy child.

THE WITNESS: Well, again, you know, I would agree with that statement. It never crossed my mind in the assessment of Paul Murphy during life, the way he died.

THE COMMISSIONER: I'm really asking you more now, to help us now, rather than what happened then, what you considered then. I am certainly not the slightest bit surprised that it never entered your head because I really don't think digoxin played a part now, and depending on what other evidence we have, I don't think, even now, digoxin played a part in his death.

THE WITNESS: Well, I think, in trying to respond to Ms. Cronk, I think I agree basically with that statement. I think that within the realm of medical possibility, could digoxin have entered here, I never considered it and I would still say that in view of the events that we are reviewing, I think it is unlikely but I think I would have to consider any one of these children, as she has asked or as Mr.



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Lamek asked Dr. Rowe ---

a question of degree, though, in these children? There are some children where they have a sudden onset. When the death is unexpected there is a sudden onset where one might be more suspicious of some form of poisoning, whereas, in the Murphy child, death is expected, was not to be resuscitated and he died peacefully. Would that not be less likely?

THE WITNESS: Definitely.

THE COMMISSIONER: Yes, all right,

thank you.

that point. In your review of the medical record of this child and based on your knowledge, both of his course throughout the hospital, your knowledge of the terminal events, your discussion with the attending physician when you were called and informed of his death, was there, in your view then or now, any evidence noted by the attending physicians or the nurses, of which you were aware, to suggest that any of the symptoms, which in the medical community are commonly recognized as being symptomatic of digoxin toxicity, were any of those symptoms exhibited in the death of this child?



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A. No.

Q. All right. And would you agree with me, Doctor, and perhaps you can tell me, what, in your view, are the common symptoms, known in the medical community, in certain instances to reflect digoxin intoxication. To help you in that regard we have had evidence from Dr. Rowe that in some instances such a symptom is evidenced by arrythmias, bradycardia -- you're nodding yes, Doctor, you agree?

A. Yes.

Q. All right. With infants,

vomiting?

block?

A. Correct.

Q. Again, with infants, in some

cases ventricular fibrillation?

A. Correct.

Q. All right. And in some instances, complete heart block or partial heart

A. Correct.

Q. EKG changes?

A. Correct.

Q. All right. Is there anything else that, in your view, would be a commonly accepted symptom., based on your experience and knowledge,

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Doctor, of digoxin intoxication?

In young babies, sometimes increasing lethargy and the older individual, the young adults, a rare child or rare adult will complain of yellow vision and very uncommonly psychosis.

Q. All right. And we know that this child, obviously, was not an infant, that he had spent most of his life in and out of hospitals, as you have said.

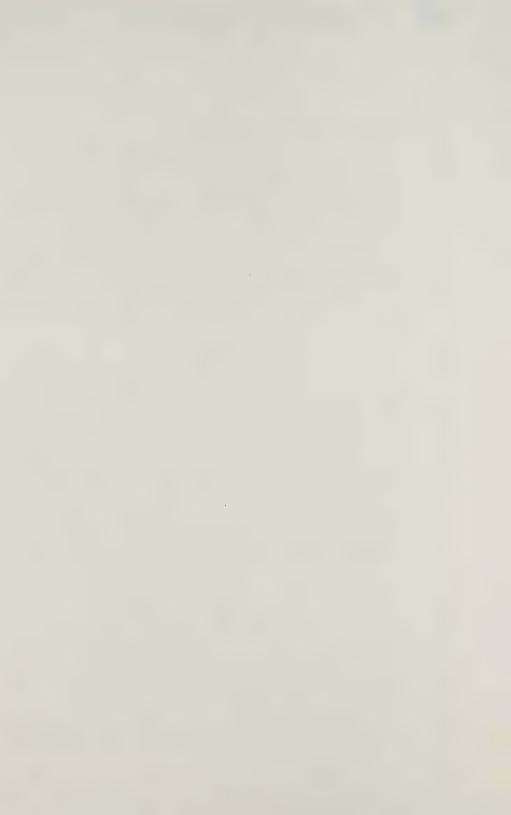
A. Right.

Q. But of the symptoms that you have agreed are generally considered to be symptomatic of digoxin intoxication and of the ones that you have just described, other than the lack of responsiveness that is noted on the medical chart, did this child, in the course of dying and at the time of death, exhibit any of the symptoms which are commonly regarded as being attributable to digoxin toxicity?

A. No.

Q. Thank you, Doctor.

May we move then to the case of John Onofre, Doctor, who, as I understand it, was admitted to the hospital on November 22nd, 1980, the day following his death -- I'm sorry, the day following his birth. Mr. Lamek just indicated that I



В6

said he was admitted the day following his death. That would be a miracle indeed.

Dr. Freedom, to review that, born on November 21st, 1980, admitted to the hospital on November 22nd, 1980, where he subsequently died on December 9th. Is that your understanding?

- A. Correct.
- $\Omega_{\star}$  And also, Dr. Freedom, as I understand your evidence yesterday, you were involved in the care and management of this child?
- A. Only during the initial part of the hospitalization, Ms. Cronk, when he was on the newborn service.
- Q. All right. And in that regard, as I understand it, you examined the child on the evening of his last admission to the hospital and again the next morning, November 23rd. To help you, Doctor, I would refer you to what I take to be your consultation note of those examinations, found at page 65 and 68 of the record.

A. On page 65, I have my consultation note on admission.

- Q. That's right, Doctor.
- A. November 22nd.
- O. Right. And if you continue?



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A. Yes.

Q. Continue over to page 68, is that not a further consultation note, indicating that you again examined the child on the morning of November 23rd?

A. Yes.

Q. Thank you.

A. I misunderstood you. Just on admission, I thought you made a reference to just prior to his death?

 $\mathbb{Q}.$  No, I'm sorry. On the day of his admission, on the morning, the next morning?

A. Yes.

Q. And subsequently, Doctor, as I understand it, you conducted a cardiac catheter procedure on this child?

A. Yes.

Q. All right. And if we turn to page 12 of the record, do we find there your reporting letter to the referring physician, concerning the outcome of the catheter procedure?

A. Yes.

Q. Okay. And if I could direct your attention to page 2 of the reporting letter, Doctor, and specifically the third paragraph, you



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confirm that the cardiac catheter study was performed on the morning of November 23rd and you indicate that the outcome of the procedure confirmed the presence of tetralogy of Fallot with pulmonary atresia with discontinuity between the right ventricle and the pulmonary arteries?

A. Yes.

Q. And that, continuing down to the end of that paragraph, you then further report that:

"At the conclusion of this study, the infant was begun on intra-arterial perfusion of an E-type prostaglandin, in order to maintain ductal patency.

At the time of this dictation, the infant is scheduled for a systemic to pulmonary artery shunt."

A. Correct.

And if we move down to the Addendum at the bottom of your letter, you report that:

John Onofre did, in fact, undergo successful shunt surgery on the morning of the 24th of November, correct, Doctor?

A. Yes.

 $\Omega_{\star}$  All right. Now, following the shunt operation on this child, Doctor, did you have



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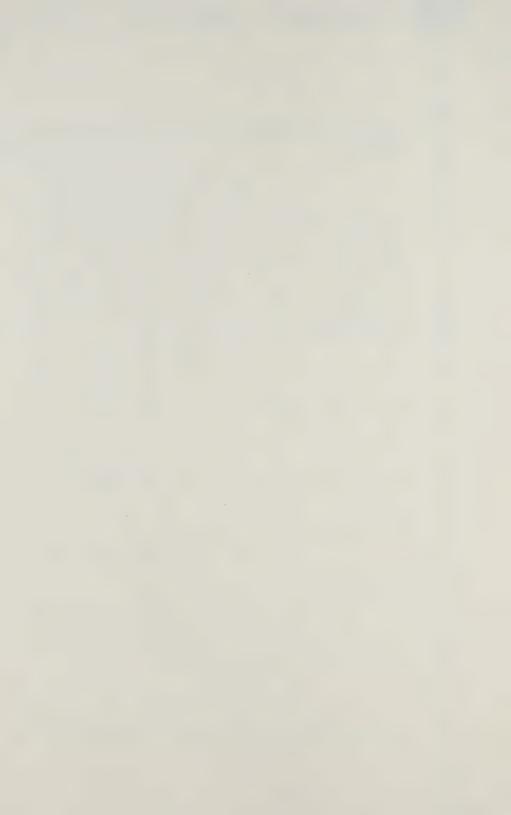
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any direct involvement in his care and managment on the ward?

A. No, I didn't.

Q. All right. To the best of your knowledge, Doctor, or do you know whether or not, digoxin therapy for this child was continued during his period in the ICU at the hospital and then again subsequently on the ward when he was readmitted or transferred to the ward from the ICU?

- A. Yes, I believe it was.
- Q. Doctor, are you familiar with the terminal events sustained by this child?
  - A. Yes.
- $\Omega_{ullet}$  Were you present for the gross autopsy that was conducted after his death?
- A. I believe, Ms. Cronk, that I did see his heart sometime later, after the autopsy.
- $\label{eq:Q.} \text{$\tt Q.$} \qquad \text{Not at the time of the gross}$  autopsy itself?
  - A. I can't remember specifically.
- Q. But you do specifically recall having seen and observed his heart?
  - A. Right.
- $\mathbb{Q}_{ullet}$  On the basis of your knowledge of his anatomical condition as disclosed by the



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catheter study, on the basis of your examination at the time of his admission and your knowledge of his subsequent terminal events on the ward and then your observations by observing the heart following the post mortem of this child, were you able to formulate an opinion as to the probable cause of death?

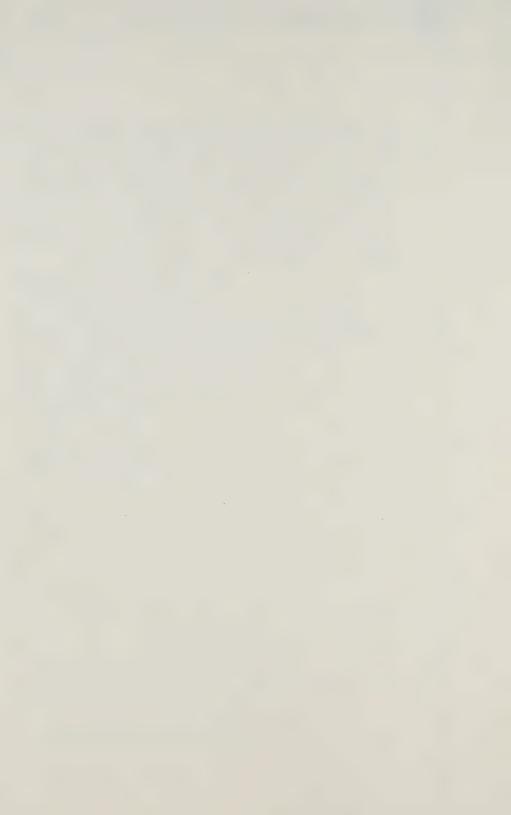
A. Well, I think it is important to go back a little bit in this baby's history. When I first saw this little baby at 5:45 p.m. on November 22nd, I wasn't even convinced he had structural heart disease because he had ventricular dysrythmias. As a matter of fact, it was a very strange electrocardiogram that referred him to me,or, excuse me, that prompted his referral, not so much structural heart disease appeared, it was only as we did more and more investigations did we find that he had, in addition to a very abnormal ventricular rythmn in his cardiogram, that he had underlying structural heart disease.

Q. That's what you discovered,
Doctor, as a result, in part, of the catheter
procedure that was carried out?

A. Well, no, he had the electrocardigraphic abnormalities, Ms. Cronk, on admission.

Q. Yes.

A. During the admission work-up,



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before the catheter study, we did a cross-sectional echocardiogram and that suggested the severe heart malformation that was subsequently confirmed at the catheter investigation.

Q. Yes

A. So, I felt we had a baby with two problems, two congenital problems; one was the severe heart disease, as you have outlined, and, two, that he had, for some reason, a most unstable, initially ventricular dysrythmia. I even wrote, and this is on page 66.

 $\Omega_{ullet}$  You are referring now to part of your consultation note?

- A. Right.
- Q. On November 22nd?
- A. Correct, that I considered that the ventricular dysrythmias could be transient, could be associated with tumours and the like. So, I was concerned about how this baby presented. The next day we do the catheter study and we find in addition the severe heart disease. That sort of litany was throughout this youngster's chart.

He did undergo successful surgery in the sense that the surgeon was able to construct a shunt and the baby survived. Our newborn results,



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at that time, suggested a mortality for a newborn shunt in the range to 25 per cent. So, I was initially pleased that this baby survived.

Q. Yes, Doctor, but the rest of his course, you know, was not as comfortable. He had wound infection, on December 2nd we noted continued ventricular irregularity on his cardiogram, by December 7th, we considered that he had necrotizing enterocolitis, an inflammation of his intestine with bloody stools and at that time, and I think again in a baby that is ill, who has undergone surgery, any infection or inflammation of the intestines can be extremely serious.

A day later, there was discharge from his wound and throughout that whole time, we were concerned, at least in the last several days, we were concerned about his oxygenation.



At the time of his cardiac arrest on the 9th he had an extremely low oxygen level of PO 2 of 15. They found virus in his stool and so I felt that this was a debilitated baby with structural heart disease, with a ventricular dysrythmia which is quite uncommon in my experience in a baby, in a newborn with heart disease, who died as a result probably of inadequate shunt and ongoing systemic infection.

Q. That was your opinion, Doctor, having observed the heart and having been informed as to the terminal events experienced by the child?

A. Correct.

Q. Doctor, if we turn to page 61 of the record, progress notes for December 8th and December 12th --

A. Yes.

Q. -- nursing note for December 8 as it appears there is rather brief, but it indicates that the incision, I take it the incision from surgery was causing the child difficulty?

A. Yes.

Q. It was gaping and there was a white discharge. And a further description of the reddened area around the edge of the incision itself. That is the description on December 8th?





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enterocolitis.

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On December 9th, again the note at the bottom of the page, I take it by the attending Dr. Lichtin, that he was called immediately at 3:20 a.m. The babe was noted to be bradycardic. When he arrived the heart rate was 40 to 100, variable, the baby was crying. IV was infusing well. The pulses were palpable.

He called the medical resident. The arrest occurred at 3:29. The arrest team arrived. Junctional rhythm was noted. Patient was intubated; received various medications together with cardiac pulmonary resuscitation resulting in the necessity for defibrilation.

The patient did not respond and resuscitation efforts were stopped at 4:10.

He then continues in the middle of the page, on page 62:

"Etiology not obvious. Didn't appear septic. Was on amphicillin and ..." I take it to be gentamycin?

> Α. Yes.

"... for necessity ..." 0.

No, that is question necrotizing

O. "No other medications. Not dehydrated clinically."





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rate?

Α.	Yes.

- Q. And then he reports on the arterial blood gases at 3:50 a.m. and indicates that Dr. Fowler was called and the parents were called following the arrest?
  - A. Yes.
- Q. As I read those terminal events, Doctor, and the description of the manner and the onset of those events there are several symptoms which would be commonly taken to be consistent with or indicative of digoxin intoxication. Would you agree?
  - A. Yes.
- Q. Right. And we are talking about the bradycardia?
  - A. Yes.
  - Q. Talking about the variable heart
- A. Yes, but again as you will recall from my consultation note he had a variable heart rate before he was on any medication as well.
- Q. And talking as well about the specific indication that junctional rhythm was noted?
  - A. Yes.
- Q. And the child was defibrilated and didn't appear to be septic nor dehydrated yet



arrested and could not be resuscitated?

A. Right.

Q. In your view, Doctor, based on those terminal events and the experience and exposure you had to this child prior to death, are any of those symptoms indicative of digoxin intoxication?

A. I think as you have already said they were certainly consistent with digoxin intoxication.

This youngster a week before death had a normal digoxin level of 1.1. His kidney function was unchanged. As one looks at the BUN throughout the chart, and so I think - I certainly did not consider digoxin intoxication at that time.

Q. Looking at the terminal events now in the light of the knowledge that you now have sitting here today, in your own view were those terminal events and the onset of those events and the manner of the child's death indicative of digoxin intoxication?

 $\mbox{A.} \qquad \mbox{I wouldn't use the word, Miss} \\ \mbox{Cronk, "indicative".} \\$ 

I think this baby was a very ill baby, and I think the events could be now interpreted consistent with a digoxin mode of death, but again I think based on the data that we had at the time that

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was not in consideration.

Q. Doctor, you told us at the time of the child's death you did not consider digoxin intoxication?

A. Yes.

Q. As being a contributing factor I take it nor a potential explanation for his death?

A. That is right.

Q. Do you recall any discussion following his death amongst other staff cardiologists whether at the cardiology conference held on the morning following his death or in the days thereafter which centered around the issue of digoxin intoxication as possibly contributory - as a possible contribution to the cause of death?

A. No, I do not.

Q. Doctor, could you turn with me to page 96 of the record if you would, please?

A. Sorry? 96?

Q. Page 96. That page of the record, Doctor, is the fourth page of a document described as a cardiac operation sheet.

Can you help me first, Doctor, I had understood that these forms of documents were completed once a patient had undergone surgery, had been released from surgery and was in a postoperative





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6	2	condition on a	ward:	in the hospital. They were
	3	ultimately comp	pleted	by the surgeons involved in the
	4	surgical proced	dure?	
	5		Α.	Right.
			Q.	Is that your understanding?
	6,		Α.	Yes.
	7		Q.	At page 96 of that operation
	8	sheet, Doctor,	I dra	w your attention to the remarks
	9	section at the	botto	m of the page. As I read the
	10	notation it rea	ads:	
	11		"Died	suddenly about 3:00 a.m. on
	12		ward.	Some question earlier in day
	13		about	necrotizing enterocolitis but
			felt	likely had a"
	14	I am sorry, is	it mi	ld?
	15		A.	Mild viral diarrhea.
	16		Q.	" mild viral diarrhea.
	17		Ectop	ic beats which were present"?
	18		Α.	Which were present pre-op
	19	continued post	-op.	
	20		Q.	"Feel that he likely had a
	21		sudde	n arrhythmia".
			Α.	Yes.
	22		Q.	And if we look at the top of the
	23	page under the	secti	on marked complications, Doctor,

where it says "cardiac - arrhythmia" there is a



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question mark beside the cause of death?

- A. Correct. I see that.
- Q. Doctor, can you tell me first do you agree that the death of this child was sudden?
- A. I think the baby's deterioration was, over that week, was fairly profound and ongoing, but he did die on that evening. I am not sure it was sudden or not.

He was an ill baby. There were concerns about him. Again since I didn't participate in his active care those last few days I don't have that perspective. But certainly as I read the chart I find that they were very concerned about this baby.

- Q. Well recognizing, Doctor, that following the catheter study you didn't actively participate in the care of this child --
  - A. Right.
- Q. -- nevertheless you told me you were familiar with the terminal events, you were familiar with the manner of his death?
  - A. Just from reading the chart.
- Q. All right. On the basis of your review of the chart and given your prior knowledge as to the anatomical condition of the child and the observations that you personally made when you observed him on admission, are you in a position to offer an



opinion as to whether or not the death, the arrest was in fact sudden?

- A. Certainly he was alive one minute and had a problem which was noted in the chart, and I would agree that is sudden.
- Q. Doctor, from the balance of the surgical note contained on the operation sheet, as I read it there is some question in the mind of the author as to whether or notarrhythmias could in fact be said to have caused this death.
  - A. Yes.
  - Q. Do you share that view?
- $\label{eq:A.No,I} \textbf{No, I think it was more complex}$  than that, Miss Cronk.

I think we knew this youngster had severe arrhythmia from the first time we saw him at Sick Children's Hospital. We were concerned about intercurrent infection and an already ill baby. So I would have placed ongoing cardiac dysrhythmia in the context of a sick infant who had wound infection, bloody diarrhea and possibly necrotizing enterocolitis.

Q. Well, Doctor, I am not sure that I understand that fully. In your mind were arrhythmias appropriately to be described as the cause of death of this child or was that something that you felt was not the cause of death?





A. I left it would have to be
integrated into the factors I have just mentioned;
that one can die of arrhythmias with a normal heart
structurally and overwhelming infection, and I think
the concern of the ward physicians was that this baby
had infection; had placed him on antibiotics,
amphicillin and gentamycin, so again I would have to
say that he had arrhythmia or dysrhythmia at the time
of his death but I would integrate in.

Q. Doctor, would you agree with me that arrhythmias in certain situations are of and in themselves symptomatic of digoxin intoxication?

A. Yes, I would.

Q. Right. And that that is a possibility in this case?

A. Yes.

Q. Doctor, did you subsequently receive a copy of the final autopsy report that was prepared on this child?

A. I believe I did.

Q. Would you turn with me, sir, briefly to page 33 of the record? Do you have it, sir?

A. Yes.

Q. I am referring to the final paragraph in the final autopsy report, Doctor, in which



"Death in this case was somewhat



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it is recorded:

sudden and unexpected being manifested by sudden onset of bradycardia and cardiac arrest. In view of the subsequent cases on this ward of digoxin overdose, this must now be raised as a possibility but there is no confirmation of this since at the time of the gross autopsy it was not

Stopping there for a moment, Doctor --

considered."

A. Yes.

-- I take it from your prior evidence that insofar as you are aware that accurately records the situation at the time of the autopsy that digoxin intoxication was not considered as having played a part in this child's death?

> Α. That is correct.

Q. And continuing:

"Because of this possibility, in retrospect, the Coroner's Office (Dr. Tepperman) has been notified (June 30th, 1981)."

Doctor, did you participate in the decision to notify the Coroner of this child's death?

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Α.	No,	Ι	did	not.

Q. Were you aware - I am sorry?

A. As a matter of fact I think it was either you or Mr. Lamek that pointed that out to me so I was quite surprised to see that.

Q. All right.

So prior to the commencement of these proceedings and the hearings of this Commission you were not aware that it had been reported?

A. Correct.

Q. Do you have any understanding or any information, Doctor, as to why it was reported at the end of June, 1981?

A. No.

Q. Do you know who did so?

A. No.

Q. Thank you, Doctor.

Doctor, finally I should ask you was there anything that was disclosed in the final autopsy report that was in addition to or supplemental to the information that was available to you at gross autopsy that influenced you to change your opinion as to the likely cause of death of this child?

A. I wouldn't use the word "change".

This youngster was found at autopsy to have a virulent bacteria in his bloodstream E. coli,



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which I think would support the concern of the ongoing infection, and in addition the histology of the heart muscle showed contraction band necrosis which is an indication of heart muscle injury. And I would wonder whether that would be a contributing factor from the first time we saw this youngster to his ventricular disrhythmias.

Q. In your view, Doctor, was this child's death at the time at which occurred unexpected as is suggested by the author, the signatory of the final autopsy report?

> Α. No.

You were not surprised that he died when he did?

No, I think again reading the chart fully and seeing the ongoing concerns about infection, bloody stools, this baby was very ill, and I am saddened for the baby and the family, but I think his demise was consistent with the multisystem problems that this baby had.

> Thank you, Doctor. 0.

Doctor, the next child who died on the ward to which I direct your attention was Real Gosselin.

> Α. Yes.

You told us yesterday, as I Q.





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recall your evidence, you had no direct involvement in the care and management of this patient during life?

> Α. Correct.

0. As I understand it, however, Doctor, you did report on the death as the referring physician to the doctor who had referred the child to the Hospital for Sick Children?

A. Correct.

And I refer you to Exhibit 72,

Α. Yes.

Doctor, and page 35 of the record.

Do you have that, Doctor? 0.

Α. Correct.

Is this your reporting letter to Q.

Dr. Miller?

Α. Yes.

Concerning the death of the child? 0.

Α. Yes.

Doctor, to be clear as I under-Q. stand it the child was admitted on December 17th, 1980

and died at approximately 3:20 a.m. on December 18th.

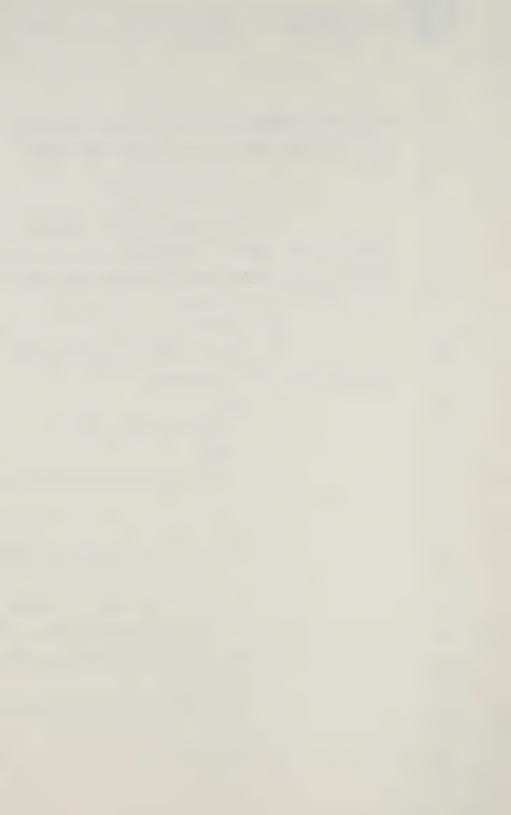
Α. Correct.

Does that accord with your under-0.

standing?

Α. Yes.

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Q. And if we look to the first paragraph of your reporting letter.

A. Yes.

Q. You indicate in that paragraph first the fact of the child's death on the morning of December 18th, and second that the death occurred several hours prior to scheduled time for operative therapy of severe thoracic coarctation:

"The baby had seemed relatively comfortable, was receiving prostaglandin, and suddenly became apneic and bradycardic and despite vigorous resuscitative efforts could not be resuscitated."

Can you tell me, Doctor, at the time of preparing this reporting letter, given that you did not have any direct involvement in the care and management of the patient, had you had an opportunity to review the child's medical record in the form as it then stood?

- A. No, I had not.
- Q. Upon what then, Doctor, did you rely in preparing this reporting letter?
- A. Two things. I had spoken to the resident on call and had been informed that this youngster was stable and had had what seemed to be



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a good response to prostaglandin.

The next thing - so that was sort of my preliminary - that was in the first paragraph of the letter.

Then after the autopsy I did have a chance later that day to go and see the heart, and that was the second paragraph of the letter.

Right. You are referring now to the remarks in the second paragraph setting out your observations at gross autopsy?

A. Right.

And then if we continue in the paragraph on page 2, the first paragraph, your summary section, you indicate:

> "This infant had a severe thoracic coarctation of the aerota ..."

Yes. Α.

O. "... and I am really disturbed by this baby's demise just a few hours prior to surgery."

Α. Right.

Stopping there for a moment, Dr. Freedom, I take it from your earlier remarks in the letter that the child was in fact scheduled for surgery. Was it that day, Doctor?





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Α.	On	the	18th,	Ι	believe.
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Q. That is later in the day on which he actually died?

A. Correct.

Q. Can you tell me, Doctor, why at the time of hearing of this child's death you were, as you have indicated, really disturbed?

A. Firstly, I feel uncomfortable that I wrote this letter, because certainly my colleagues called my attention to this youngster's chart after the events of March 1981. When I had the opportunity to review the chart in depth, I was very concerned that my first paragraph of the letter, and certainly my last paragraph of the letter, were not accurate. I was taking that letter in the context of December 18th, having been told, or at least appreciated the fact that "he was stable and having a good response to prostaglandin." I would have thought he should have survived the surgery. I think it is unfortunate that the chart speaks for itself much better than this letter.

As of March of 1981, or after that weekend when I started going through with all of our group the charts of all the children that had



died during that period, it was very clear to me that Real Gosselin did not have a good response to prostaglandin; still had an extreme blood pressure difference between arms and legs; required lasix; was retaining carbon dioxide.

THE COMMISSIONER: Would you just go a little bit slower on this, Doctor.

He did not have a good response to prostaglandin, what is prostaglandin?

THE WITNESS: Prostaglandin is a medication that was actually devised and discovered at the Hospital for Sick Children by Dr. Peter Olley and his collaborators. The purpose of prostaglandin is to dilate the ductus arteriosis. Now, in children or in babies with severe narrowing of the aorta, such as a coarctation of the aorta, or the worst form of narrowing which is virtual discontinuity between the ascending portion of the aorta and the descending portion of the aorta flow to the lower portion and the aorta is maintained through this fetal channel, the so-called ductus arteriosis. The ductus normally constricts within a few days, or a week of birth and the use of prostaglandin has been shown to help dilate the ductus to help flow to the lower



portion of the body and to maintain a reasonable blood pressure.

THE COMMISSIONER: You indicated that he did not have a good response to it, and what else did you say that you had discovered?

THE WITNESS: Again, I had been informed, Mr. Commissioner, at least I understood that he had not had -- excuse me, that he had had a good response to prostaglandin. However, on review of the record it was either my impression or my understanding there was an error.

THE COMMISSIONER: Did you say in the letter that he had a good respnse to prostaglandin?

THE WITNESS: I said on line three:

"The baby had seemed relatively comfortable, was receiving prostaglan-din..."

THE COMMISSIONER: Yes.

THE WITNESS: And again I wrote that--THE COMMISSIONER: I take it we are to

infer from that at least the recipient was to infer that he had had a good response?

THE WITNESS: Correct, and that is what I understood.

THE COMMISSIONER: All right.



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THE WITNESS: Again, as I said, Mr. Commissioner, after the events of March of 1981 when I had the charts in front of me and reviewed the charts, I was concerned by the tone of this letter, because as I said, the hospital record spoke for itself.

THE COMMISSIONER: What else were you going to refer us to? You said he had not had a good response to prostaglandin.

THE WITNESS: He had not had a good response. The notes of the blood pressure showed a persistent rather substantial pressure difference between arms and legs.

THE COMMISSIONER: And what is the effect of that?

THE WITNESS: That means the heart has to work harder to try and pump blood against this severe narrowing.

For instance, I believe it was on December the 17th at 1330 they describe the right arm blood pressure at 166 over P, meaning pulse, and in the leg 60 over P. 2000 hours, 124 over P.

THE COMMISSIONER: I am sorry. You are reading from a certain page?

THE WITNESS: I apologize, Mr.



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Commissioner, I am reading from my notes which I extracted from the hospital record.

Q. To assist you, Doctor, perhaps you could turn to the progress notes at Page 43 of the record, the nursing note begins on the 17th at 7 a.m. and continues through the 17th until the time of death.

A. Yes.

O. To assist the Commissioner, could you indicate for us what features recorded in the progress notes you considered significant when you did review the medical record of this child, and which influenced you to feel that your original understanding of the child's condition had been inaccurate?

A. Yes. If you just take that,

I believe it is line four where it says:

"T 37<sup>4</sup>. Heartrate 126.

Respiratory rate 66. Blood pressure 146/P..."

meaning pulse.

"Left leg 70/P."

There is a very profound pressure difference between the right arm and the leg of 76 millimeters of mercury. Now, that type of blood pressure difference





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a very	sick	baby.	So,	as I	read	this	now	in	retro-	
spect										

THE COMMISSIONER: What is the effect

THE WITNESS: The heart has to work

THE COMMISSIONER: To ---?

THE WITNESS: To pump blood across this narrowing, that the heart will dilate in response to this workload and it has been shown ---

THE COMMISSIONER: What is the appropriate blood pressure of both arm and leg?

THE WITNESS: In babies the leg pressure should be even slightly higher than the arm pressure.

THE COMMISSIONER: And if it isn't higher, if it is lower and in this instance the blood pressure is lower, what does that mean?

THE WITNESS: That suggests that there is a narrowing, or an obstruction in the aorta so that the pressure that is delivered by the heart can't be transmitted below the narrowing.

THE COMMISSIONER: All right.



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THE WITNESS: The effect of this is to cause the heart to dilate; for the lungs and liver to be congested; and it has been shown as well, at least in experimental models, that if you create a narrowing in the aorta you get abnormal blood flow from the coronaries to the heart muscle. So again, Mr. Commissioner, as I read the notes of this chart, as I said, the charts in the hospital record spoke for itself and my letter was in error.

MR. ORTVED: Just on that topic, Mr.

Commissioner, just so the record will be clear, I think

Dr. Rowe made reference on Page 57 in his analysis

of the absence and effect of the prostaglandin.

THE WITNESS: Yes, and that was, Mr. Commissioner, when I had started to read my numbers wrong.

O. Well, with gratitude to Mr. Ortved, I take it, Doctor - that well, perhaps you can tell us what features are recorded in the progress notes that led you to the view that the child had in fact not responded adequately to prostaglandin therapy that had been prescribed?

A. Several features, Miss Cronk.

One,I think most striking was the profound and persistent difference in blood pressure between upper and



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lower limbs. Number two, and again I wish I had re-
corded the page number from the chart, they describe
his liver at five centimeters, suggesting that this
was very significant ongoing congestive heart failure.
On page, and I can't read the page number, Mr.
Commissioner

O. What is the one before, Dr.

Freedom?

A. Maybe it is 44, Page 45.

Q. And you are referring to the note on what you think is Page 45?

A. I believe where it is 17.12.80 in the middle of the page.

O. Yes.

A. "2220".

U. That is on Page 45, Dr. Freedom.

A. It says: "PCO 2-46,"

and again that the baby, that is breathing 45 to 50 a minute. Receiving oxygen; a PCO 2 of 46 as well as concern, suggesting that the baby is tiring out, so to speak. Most of us, if we breathe fast will blow off carbon dioxide. So, a CO2 would be in the range of 30-32. A level of 30 to 40 is normal and this baby was at 46.

Q. Dr. Freedom, is that a doctor's

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note, to the best of your knowledge, at 2220 on the 17th?

A. I can't read the handwriting, but it is most unusual in my experience to see a nurse put into the progress notes blood gas analysis data.

Q. Would you infer from the indication of the information recorded in the note that it is likely it was made by a doctor?

A. Yes.

Q. And I note as well the final entry after the recording of the blood pressure levels and the oxygen levels, that as you have indicated, the child is indicated to be:

"Stable for the present but requires relatively urgent operative intervention."

Am I reading that note correctly?

A. I would think so.

O. Would you agree with me,

Doctor, that notwithstanding, at least in light of the vital signs information and the oxygen recordings recorded above the doctor, at the time of making this note, appeared to feel that the child was relatively stable, although he needed close watching?

A. Yes, I would think so.



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3	Q. Doctor, was there anything
	else in the progress notes that led you to the view
4	that the child's condition was more severe than you
5	had been led to believe?
6	A. Well, I would think, Ms. Cronk,
7	this baby was very ill, requiring lasix, had a huge
8	liver, five to six centimeters.
9	THE COMMISSIONER: What is the
10	appropriate size of a liver?
	THE WITNESS: Of a liver?
11	THE COMMISSIONER: For a child of that
12	age?
13	THE WITNESS: Often to be palpable one,
14	maybe one and-a-half centimeters below the costal
15	margin, Mr. Commissioner, and they note, and I will
16	have to find the page, 7 p.m. on December 17th they
17	describe the liver as five to six centimeters. I
	will see if I can find that for you, maybe I can
18	find that for you at the break.
19	Q. Doctor, you have referred to
20	Page 44, the note at 1900 hours on the 17th.

Page 44, the note at 1900 hours on the 17th.

A. Yes, there it is.

Q. There is an indication that the liver had increased to five centimeters.

A. Correct.

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referring to?

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Q.	That	is	the	note	you	are

A. Yes. Then again the liver had increased five to six centimeters despite anticongestive therapy.

O. Doctor, also in that note at 1900 hours, there is an indication, as you indicated, both to the size of the liver and as well the indication that the child needs careful monitoring, that is at 7 p.m. on the 17th, correct?

A. Correct.

O. And if we move to the note that we referred to a moment ago at approximately 10:20 p.m. on the 17th. There is confirmation again by the attending physician, or at least the observing physician, that the child still required careful monitoring, nonetheless his condition at that stage appears to have been stable.

A. Correct.

Q. And then the very next note, recognizing that some of these notes appear to be out of order because there is a note on the next page, Page 46, December 17th.

A. Yes.

Q. The next note, again the bottom



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bradycardia.

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of Page 45 is at 3:30 a.m., and that is the arrest
note. The doctor records that he was called by the
child's cardiac arrest at 2:50 a.m. and arrived at
3:20. Resuscitation had been continued for 45
ninutes to no avail. Baby had been on IV, prosta-
glandin therapy; some apneic, is that stats?

Α. I would say spells.

Spells, were recorded, and I 0. can't read the next word, baby's lobes?

I would say, however, no

0. All right, however, no bradycardia, prostaglandin was continued because of risk of ductal closure.

> Α. Right.

The digoxin had been held 0. yesterday in a.m. and p.m., because of level of

Now, stopping there, Doctor, the biochemistry reports for this child indicate that a sample was taken on December 17th which resulted in a level of 3.7 nanograms for digoxin.

> Correct. Α.

Twice, however, in the progress 0. notes we find a reference to a level of 3.9, and again



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sorry.

17:

n the discharge	report in the	record we find a
reference to the	3.9 level all	attributed to December
7th.		

A. Yes.

Q. I am not sure, Doctor, that much turns on .2 nanograms, but can you help us, do you know or have any reason to believe that the level recorded on the biochemistry computer sheet is inaccurate?

 $\hbox{A.} \qquad \hbox{No, I saw that discrepancy}$  as well, I have no explanation for it.

Q. Doctor, on the basis -- I am

A. I would like to clarify one thing, that note you refer to on the bottom of Page 45?

Q. Yes, Doctor?

A. That was the staff physician's note, Dr. Vera Rose, R-o-s-e, and that note was obviously written, she was not in the hospital at the time, and I believe she had come into the begital and wrote that note.

Q. Doctor, if we look at the next page, then, on Page 46 a note attributed to the 18th of December, and this note appears to have been written



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by Dr. Mountstephen at the time of the arrest.

Yes. Α.

and dilated, no output and cardiopulmonary

He was called at 2:30 hours and he arrived to find the baby being bagged, external cardiac massage being done, the child was asystolic, various medications and resuscitative measures were undertaken with no electrical response; 45 minutes into arrest; no electrical activity; pupils fixed

resuscitation was stopped. Α.

Q. I take it Dr. Mountstephen

was present for part of that resuscitative effort and those were his observations at the time?

Ves

Yes, I would agree.

Doctor, you referred as well

in your report in letter of December 18th to Dr. Miller, apart from your having been as you then described it, disturbed by the child's demise and you indicated you doubted that the demise could be explained purely on the basis of apnea secondary to the prostaglandin therapy, and at the time of writing the letter you really did not have a good explanation for the baby's sudden deterioration and death?

Yes.



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Q. Can you help me, Doctor. I take it that at that time you did not feel, on the basis of the information that had been provided to you that the death was attributable to the prostaglandin therapy and related appea?

## A. Correct.

I also formulated that letter, Miss Cronk, on my understanding that this baby had a good response to prostaglandin. If it had a good response to prostaglandin I would have thought it would have survived to make it to surgery, It is quite apparent that I was wrong and I am embarrassed about that.

Q. Well, Doctor, ---

MR. ORTVED: Let him finish.

MS. CRONK: I am sorry.

THE WITNESS: I was saying I am

embarrassed by that and I think perhaps, like a lot of things in life, much better than my letter is the hospital record that speaks for itself. This was a very ill baby, it did not have a good response to prostaglandin; it had a larger liver and, indeed, the fact that this baby's bilirubin was so high I would even wonder if there was liver disease secondary to heart failure and inadequate profusion.

So, as I said, I am uncomfortable about this letter, I wish I had the chart at the time and



it taught me an important lesson.

Q. Doctor, surely, and I accept that fully, after you had an opportunity to review the hospital record, I take it that your opinion changed rather dramatically from what had been indicated in your report?

A. Right and I even, I believe, when I discussed it with the police some months after this baby died, I had already told them I was concerned about this letter.

Q. May we take it in two stages,
Doctor? At the time of writing this reporting letter
you had not had the opportunity to review the record,
but you had observed the heart?

A. Correct.

Q. Was there anything based on your physical observation and examination of the heart that suggested to you that the death of the child was attributable to the anatomical condition of the child?

A. Yes, the heart disease itself was very severe.

Q. And following your observation of the heart, you then subsequently reviewed the record and having reviewed the record did you then formulate an opinion as to the probable cause of death



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of this child?

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Α. Yes.

0. And if so, could you tell us what that opinion was?

Yes. I thought the baby died as a direct consequence of a severe narrowing of the aorta. That the baby died from severe heart failure. That in a baby that did not have an adequate response to prostaglandin.

Fairly, Dr. Freedom, I should tell you that Dr. Rowe testified that in his view the death of this child was not induced by the prostaglandin therapy and the child's reaction to it.

> Α. Right.

0. Do you share that view?

Α. Yes.

Can you tell me, then, what 0.

you meant when you said in describing your opinion then formed as to probable cause of death, the relevant factor was the child's failure to respond to prostaglandin therapy?

I'm not sure I understand you. Α. I feel that if this baby had responded to prostaglandin opening of the ductus that the baby should have done better. The fact that the baby had not responded to



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prostaglandin had a severe and unopened narrowing I think contributed directly to this baby's death.

Q. I see, but the prostaglandin treatment itself did not trigger the death in your view?

A. Right.

THE COMMISSIONER: Does prostaglandin ever have that effect?

THE WITNESS: Yes, it has been described, Mr. Commissioner, as promoting profound apnea, seizures and hypotension.

O. Doctor, we have mentioned the digoxin level that was recorded on the 17th of December at the hospital.

A. Yes.

Q. And the evidence to date indicates that the child as well was digitalized at the referring hospital in Winnipeg and received a total digitalizing dose of 50 milligrams per kilogram.

A. Right.

Q. Dr. Rowe has testified for the Commission that in his view the digoxin administered in Winnipeg was insufficient to produce extreme toxic symptoms. Do you agree or disagree with that view?

A. I agree with that.



O. Doctor, I take it inasmuch as there is no reference in your reporting letter of December 18th to the digoxin level that had been recorded at the hospital, that you were either unaware of the level that had been recorded on December 17th at the time of preparing the letter, or you were aware of it and attached no significance to it. Could you tell me which was the case?

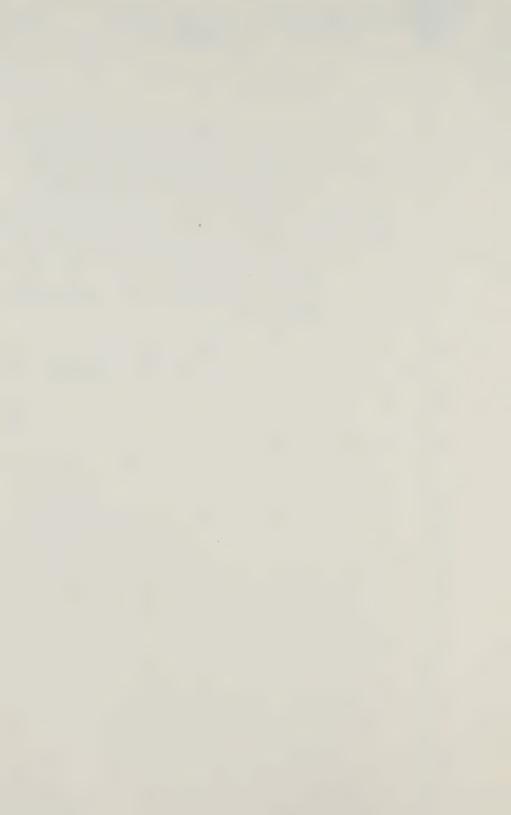
A. I was unaware of it.

O. When did you subsequently become aware of the digoxin level?

A. When I reviewed the chart after the events of March 1981.

Q. And having done so, Doctor, did you attach any significance to the digoxin level when reconsidering the cause of death of the child?

A. No. It was certainly above what we would consider a therapeutic level. It had been held from the time of admission and so I was unconcerned that this contributed to the youngster's death.



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	0.	Well, that level in fact was				
obtained on the day, on December 17th.						
	Α.	On admission.				
	0.	The day before his death on				
admission, is t	hat corr	cect?				
	Α.	Yes.				
	0.	And there was no subsequent				
level obtained	in the h	nospital, the child didn't liv				
until surgery?						

- Α. Correct.
- 0. That was the only level obtained?
- Α. Correct.
- Doctor, did you in due course at the time of conducting your overall review of this chart review as well the final autopsy report and the preliminary autopsy reports?
  - A. Yes.
- Was anything revealed or disclosed in the final autopsy report that caused you to reconsider your view as to the cause of death of this child?
- No. I think, Ms. Cronk, it supported my concerns that the baby had a severe narrowing of the aorta and some underdevelopment of the



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pros	taglandi	n.							

0. Did you, Doctor, after the date of your December 18th reporting letter to the referring physician have any further communication in writing with him after this child's death?

Yes. Again, he had received my letter and he sent me a letter in return suggesting that perhaps he could find a reason that prostaglandin could have accounted for this youngster's death. The physician, that actually was Dr. Gordon Cumming from Winnipeg, he suggested that perhaps if the ductus had been dilated that the youngster could have flooded the lungs. I passed that letter on to Dr. Peter Olley who had been instrumental in the discovery of prostaglandin and its use in children heart disease.

0. Did you have any further communications, Dr. Freedom, with Dr. Miller to whom you had addressed your earlier reporting letter?

Yes, I spoke to him as well. I can't remember the time framework. I remember that he had called me or I had had some conversation with him that he had been in touch with the Gosselin family.

And I take it you informed



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him at that time of your subsequent revision as to your opinion as to the cause of death?

Α. No, I am afraid I did not. I believe my conversation with Dr. Miller was during a time of Real's hospitalization. I don't remember if I

But you had conversations subsequently with Dr. Cumming from Winnipeg, you said?

had gotten back to him with an addendum.

Well, you know, in the immediacy of my letter back to him. So, it was not after March of '81, it was after Real died, within the next month or so.

All right. I take it, Doctor, that in the case of Real Gosselin you were satisfied that having reviewed the medical record that its contents and your review of it helped you to establish, although you had never been personally involved in the care and control, medical control and management of this child during life, helped you to establish an opinion as to the cause of death?

> Α. Yes.

Doctor, you mentioned as well that the timing of the review of the Cossellin chart was done at a time when you were reviewing all of the medical charts of the children who had died on the



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cardiology wards?

A. I can't remember if it was all the children. I know that we, after the events of March of '81, the physician to whom these children had been referred went back over the charts in great detail. So, again, that's when I reviewed Real Gosselin.

- 0. Did you at some point undertake a complete review of the medical records of all of the children who died between July of 1980 and March of 1981?
- I know that our division had looked over all of these deaths. I can't say that I in particular have looked over the charts of every one of the children who died.
- All right. Doctor, with reference now to Stephanie Lombardo.

Yes.

You told us yesterday, if I correctly understood your evidence, that once again you had no direct involvement in the day to day care and management of the child during her life, is that correct?

- That is correct. Α.
- You did, however, as I understand 0.



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it once again, performed a cardiac catheterization on the child on December 15th?

> Α. Correct.

If we turn to Page 66 of the 0.

record of Stephanie Lombardo, which is Exhibit 78.

A. Page 66?

That's correct. Do we find there,

Doctor, your report as to the results of the catheter study that you had carried out?

> Correct. Α.

0. And your findings at that time

as I take it are fully set out under the Final Diagnosis section?

> Α. Correct.

0. Of the report?

Correct.

And were primarily that the

child suffered from tetralogy of Fallot with severe, and I am hesitating.

> Infundibular. Α.

Infundibular and valvar pulmonary 0.

Yes. Α.

That was the predominant finding? 0.

Well, I would think, Ms. Cronk, Α.

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the first two features were the predominant.	[ t]	nink
perhaps the severe hypoplasia of the main and b	ora:	nch
pulmonary arteries, I could continue that in the	ne :	same
line because it was so important to this child.		

All right. You are referring 0. now to the second entry under the diagnosis section of your catheter report?

Α.

0. All right. And those two in combination reflect the fundamental problems that the child was suffering?

> Α. Correct.

Doctor, having completed the catheter procedure on Stephanie Lombardo, did she in your view tolerate the procedure well?

Α. Again, I can't recall. I have not gone over this chart in great depth because my involvement with Stephanie was just at that one point in time. So, I would have to ask your permission to review the chart in depth before I answer.

0. Well, I am not necessarily asking you to do that, Doctor. I take it you have no present recollection as to whether any difficulty was encountered during the procedure or as to whether it was in fact not encountered.



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	Α.	Well, I don't have any present
recollection.	Our gro	up sees a tremendous number of
patients, so, I	mean, i	t was conceivable the baby did
have problems,	but I j	ust don't recollect them.

Doctor, following the completion 0. of the catheter study, did you have any further direct involvement with this child at all during life?

No direct involvement. I do remember reviewing the angiograms at our morning conference and discussing the concern that we all had that her pulmonary arteries, her lung arteries were very, very small.

O. All right. And in addition to that discussion, I take it that you would have been present at the morning cardiology conferences when your case would have been reviewed on a number of occasions prior to her death?

> Α. Correct.

All right. Following her death,

Doctor, did you attend at the --

I don't believe she had an Α.

autopsy.

Q. That's why I am hesitating, I don't think there was an autopsy of this child.

> Α. No.



Q. On the basis of the understand
ing that you gained as to her anatomical condition
based on the catheter study and the discussions that
were held during the cardiology conferences, were you
in a position following her death to formulate any
opinion as to her cause of death or did you undertake
a review of her record at any time for that purpose?

A. I didn't per se, Ms. Cronk, review her record in that regard. I have had conversations with Dr. Rowe about this child.

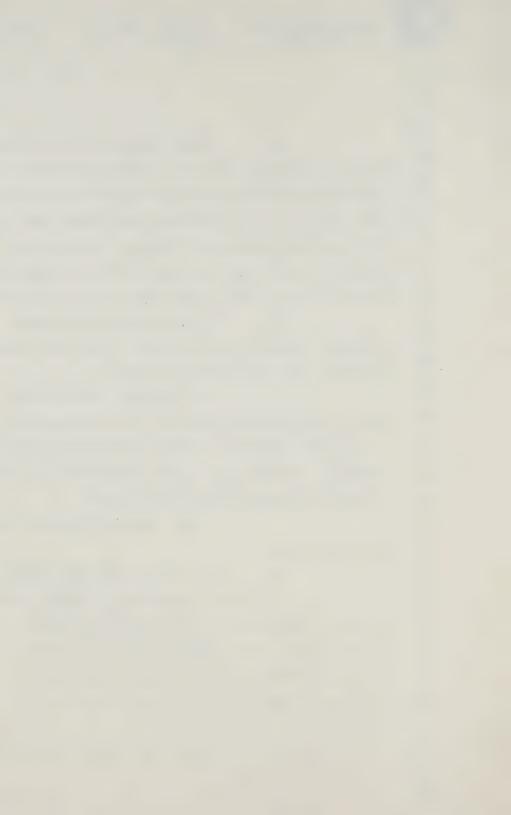
O. Do I correctly take it then,
Doctor, that following her death and continuing to date
you have not undertaken a review of her record for the
purposes of determining in your own mind what would be
a likely or probable cause for her death?

A. I have not done that with this particular chart.

Q. All right, thank you, Doctor.

It is our understanding, Doctor, that Stephanie Lombardo was not prescribed and did not receive digoxin in the hospital during the course of her last admission. Are you aware of any instance at the hospital when digoxin was administered to this child?

A. Again, Ms. Cronk, I just would



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have to beg the issue. I have not gone through this chart. If you say she was not prescribed digoxin, I believe you.

Q. Well, I take it, Doctor, you do not have any knowledge on that matter?

A. Correct.

Q. Thank you. Doctor, could I refer you next then to the medical record of Jesse Belanger, which is Exhibit 79.

As I understand it, Doctor, you did have more direct involvement with this child than you had had in the case of Stephanie Lombardo?

A. Correct.

O. Once again, Doctor, the child was admitted on November 18th, 1980, two days after birth and subsequently died in the hospital on December 20th, 1980. As I understand it, you were designated the Hospital for Sick Children referring physician for this child, is that correct?

A. Correct.

Q. And, further, you examined the child on the day of its admission to the hospital, that is, November 18th?

A. Correct.

Q. Could I refer you, Doctor, to Page 75 of the record to a report of consultation



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which I take to be your consultation note following the examination of the child on November 18th.

> Correct. Α.

All right. And do I correctly 0. take it, Doctor, by virtue of the comments set out on Page 1 of the consultation note that your impression at the time of the admission was that the child was suffering from complex congenital heart disease and that you based this impression in part on the results of a two-dimensional echocardiogram that had been performed that day?

> Α. Yes.

Ο. And if we turn to the next page,

Doctor, Page 76 of the record. You indicate that,

"At the present time, infant is not in congestive heart failure -- but certainly needs cardiac catheterization to define more clearly the anatomic and hemodynamics --"

Am I reading that correctly?

That's correct. Α.

All right. And you suggested 0.

there was some suggestion of some degree of what I take to be pulmonary stenosis.

> Yes. Α.



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		Q.	•	And	complex	congenital	heart
disease.	Is	that	corre	ct?			

Α. Correct.

Q. Now, subsequent to having examined the child, Doctor, did you proceed to conduct a cardiac catheterization?

Yes.

I can't remember the exact day I did it. We had considerable concerns about this baby and the dysmorphic features. I believe we didn't do it on the 18th, we did it, I believe, a day or so later.

> 0. All right.

Α. I'll have to check that.

Q. Did you conduct the catheter

Yes, I did. Α.

And subsequently, as I under-Q. stand it, following catheterization the child underwent surgical repair in December; my understanding is December 22nd.

> Correct. Α.

Right. Doctor, could I ask you 0. to turn to Page 8 of the record, if you would, please. That is a letter from Dr. Williams, the Division of Cardiovascular Surgery, addressed to yourself?

> Yes. Α.



O. Dated December 23rd. I take this to be Dr. Williams' reporting letter concerning the surgery that had been performed.

A. Correct.

O. Do you recall receiving this letter from Dr. Williams?

A. Not specifically, but Dr. Williams is very conscientious and I am sure I did receive it at the time.

Q. In respect of the surgery that had been conducted on December 22nd, Doctor, Dr. Williams records in his letter to you that, first, the surgery had in fact been performed. He describes the process that was conducted in respect of the procedure and then indicates, at the bottom of the second paragraph that,

"The positioning of the shunt seemed ideal, but I am concerned that it is a bit small."

He continues:

"Postoperatively, he has been stable and his saturation has been hovering about 70% to 80%."

And that the surgeons were still watching him as to whether his shunt was sufficiently large. He thought



that there was then much further question about the size of the shunt and they should probably re-operate and do a central shunt.

A. Right.

Q. Can you help us, Doctor? As I understand it, the child went from surgery to the ICU.

A. Correct.

Q. And then ultimately back to the neonatal ward until he was transferred on December 27th to the cardiology wards where he died early in the morning of December 28th. Is that correct, Doctor?

A. Correct.

Q. Once the child had been readmitted to the cardiology wards, Doctor, did you have any direct involvement in his care and management?

A. No, I did not.

Q. Do you remember examining the child at all at that stage?

A. No.

Q. Are you familiar, Doctor, with the terminal events sustained by this child?

A. Only on recent review of this hospital record.

O. I take it you were not contacted nor were you present at the time of the arrest and the



resuscitative efforts of this child?

A. I believe I was informed after this youngster had died about the events, but again, I wasn't there at the time the baby died.

Q. Doctor, once again it is my understanding and we have heard in evidence that no digoxin was prescribed or, in accordance with the evidence afforded by the medical records, administered to this child. Is that your understanding as well?

A. Yes.

Q. Doctor, this child did proceed to autopsy, as I understand it. Were you present at the gross autopsy?

A. I do remember, I believe, in seeing his heart but I can't remember specifically.

Q. All right. On the basis of your initial examination of the child, your conduct of the catheter study, your subsequent review, I take it, of the chart and your observations of the heart itself at post mortem, did you, following Jesse Belanger's death, formulate an opinion as to the probable cause of his death?

A. Yes, I was concerned that the shunt was on the small side. I was concerned that this youngster had had collapse, significant collapsed



portions of his left lung. Again, I was very concerned as well about the dysmorphic features that this baby had with a cleft palate and lip, the eye problems, so-called colobomas of his eyes.

O. Can you explain briefly, Doctor, what that is?

A. It is a deficiency of the pupils and I guess one of the colloquialisms is that children look like they have cat eyes and not infrequently when one sees a baby with these multiple dysmorphic features, midline problems, that is, with mouth and palate, nose, there is not infrequently and unfortunately so an association with severe congenital abnormalities of the brain.

O. Were those the features that you considered significant, Doctor, in arriving at your opinion as to the cause of death?

A. I am always concerned about a baby with cleft palate and lip. During any type of surgical procedure they tend to aspirate fluid secretions into their lungs. They don't coordinate their swallowing and, again, I think in the back of Dr.

Saunders' mind, who referred this baby to me, he was very concerned as to the well being of this baby beyond just the heart and the cleft lip and palate. He was



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very concerned there might be a substantial congenital malformation of the baby's brain.

Well, Doctor, so that we are clear. Other than the factors that you have just outlined and which were a source of concern to you, were there any other features in this child's condition or present at the gross anatomy of the child that you considered significant in attempting to determine what caused his death?

If I remember as well, it wasn't Α. just the baby had a partial Di George Syndrome. Maybe I am mistaken. I will have to check on that.

0. To assist you in that regard, Doctor, I would refer you to the preliminary autopsy report at Page 18 which does, in fact, record a partial Di George Syndrome.

Right.

Was that something at gross autopsy based on your observations of the heart, you felt to be a condition of the child?

Well, yes, in a sense that children with so-called partial Di George Syndrome are often more prone to infections. So, on a baby that has severe heart disease, a shunt, collapse of the lung, I was very concerned as well to hear about the



partial Di George.

Q. All right. Anything else, Doctor?

A. I believe as well the autopsy of this child did have a severe congenital malformation of his brain, so-called arrhinencephaly.

Q. I'm glad you didn't ask me, Doctor, but do carry on.

A. Again, children with bilateral arrhinencephaly are in terribly severe malformation of the brain. For the children with it that survive without heart disease, they often have problems with coordination, swallowing movements, and sort of the normal involuntary things that we all do.

Q. Doctor, we know from the progress notes that are contained in the record that amongst the terminal events suffered by Jesse Belanger, he exhibited paleness in color, a blueness in color.

A. Right.

Q. He became bradycardic?

A. Correct.

Q. At one stage his pulse was undetectable and he had intermittent, what has been described in the progress notes, as intermittent nodal complexes. Are those part of the terminal events sustained by this child based on your knowledge of the case?



Q. Right. In your view, Doctor, of those terminal events, are there any or in combination, are the terminal events indicative to you of digoxin intoxication?

A. No.

Q. At the time of the child's death and upon observing his heart at gross autopsy, did you consider or did it come to mind that digoxin intoxication might have been a contributing factor in his death?

A. No.

Q. To your knowledge, was that a matter, Doctor, that was discussed at the cardiology conferences immediately following his death or thereafter?

A. No.

Q. Subsequently, Doctor, after the child's death -- well, perhaps I could refer you first if you would to the cardiac operation sheet, another one of the forms that appears to be filled out by the surgeons after a child leaves the operating room. It is at Page 102 of the record. Once again, Doctor, if I could refer you to the remarks section of the operation sheet.



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A. Yes.

O. It's recorded that:

"The child died suddenly on transfer to 4-A!"

A. Yes.

Q. The post mortem findings, the

comment:

"Okay 24 hours earlier with..."

And I have difficulty reading the balance of the entry. Can you help me?

A. No, I have the same problems.

Q. All right.

A. It looks like with the c, with a little slash over it is with murmur of something.

I can't make out the rest of it.

Q. I think the last word is color, Doctor, but perhaps I can check that at the break and let you know.

A. All right.

O. With respect to the surgeon's note as to the death of this child, do you agree,

Doctor, that the death was sudden upon transfer back to the ward?

A. Well, he was transferred back on, I believe it was the 26th or 27th,and died the 28th.



--

So, the baby was ill, there was concern about staphylococc al infection, inadequate shunt, collapse of the lung and, again, I think that the youngster did have a cardiac arrest and, I guess, I think that looks like Dr. Williams' writing to me, interpreted those events from what his understanding was that it was sudden.

Q. Well, Doctor, I am interested for the moment in your view of the matter. A review of the record indicates that the child was transferred back from the neonatal ward to the cardiology wards on December 27th.

A. Yes.

Q. And that he died within a matter of several hours, having been transferred back to the ward?

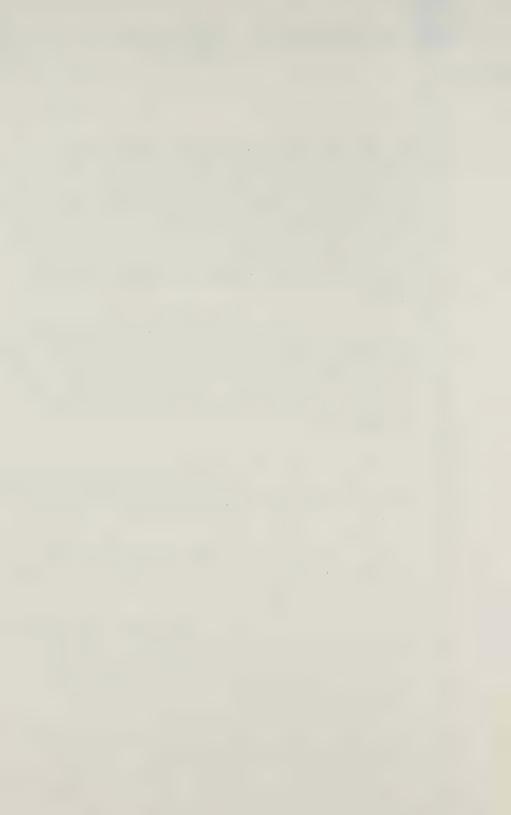
A. Yes.

Q. In your view, based on your knowledge and observation of this child, was his death sudden at that time?

A. No. I think this was a baby that had shown clinical evidence of deterioration, had raised considerable concern with his lung being collapsed, with the propriety of the shunt size.

So, I think it was gradual deterioration which then culminated in his arrest and death.

Q. Doctor, if he was in this



situation or in the process of a continuing mode of deterioriation while he was in the neonatal ward, in the normal course of events would you have expected him to be transferred out of the neonatal ward back to Ward 4-A/B?

A. I think that, again, I can't speak for the neonatologists and what their feeling was at the time. I believe that they feel once an infant with complex heart disease has heart surgery they would better be managed by the cardiac service directly.

Q. Doctor, did you subsequently after the death of Jesse Belanger become aware of the results of the digoxin assay tests that were conducted in respect of tissues from his body by the Center of Forensic Sciences?

A. I can't remember precisely.



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Q. Dr. Rowe has testified,
Doctor, that based on the forensic aspects of this
child's case, and by that the digoxin levels that
were recorded in the tissues that were tested at the
Centre for Forensic Science, that this was a child
in his view whose death might be attributable to
digoxin intoxication.

Is that a view that you share?

A. You have to refresh me,
Miss Cronk, what the findings were of the tissue.

It was my understanding that this youngster had not
had digoxin prescribed during his hospital course.

MS. CRONK: Well, Mr. Commissioner, I am conscious of the time, and perhaps if we took our break now...

THE COMMISSIONER: I was just wondering, if Dr. Freedom has not applied his mind to the subject, if digoxin poisoning is not precisely his speciality, would it be that helpful?

MS. CRONK: That is a matter that I can explore with him and his knowledge of Mr. Cimbura's testing results at the break, Mr. Commissioner.

THE COMMISSIONER: All right. Well, we will take 20 minutes anyway.

---Short recess.



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---Upon resuming.

THE COMMISSIONER: Yes, Miss Cronk.

MS. CRONK: Thank you,

Mr. Commissioner.

MR. SCOTT: I wonder if I might just deal with a small matter?

THE COMMISSIONER: Yes.

MR. SCOTT: It would be helpful to all counsel - I speak only for myself - and it certainly would be helpful to me if Miss Cronk when she refers to Dr. Rowe's evidence and summarizes it, if she could give us a note of the page or pages from which she has drawn the summary because we don't agree in every case that the summary is accurate and if we simply have the page we can then check it later.

THE COMMISSIONER: Yes.

MS. CRONK: I would be glad to do that, Mr. Commissioner.

THE COMMISSIONER: I think Miss Cronk can do that. She indicated to me that she had all of those pages.

MR. SCOTT: Sure she can do it.

THE COMMISSIONER: If you had done this to me many years ago I wouldn't have had the



faintest idea of what page it was on but of course in those days we didn't have transcripts.

MR. SCOTT: And we weren't trained like these young lawyers are trained.

THE COMMISSIONER: That is right.

MR. SCOTT: The only reason she isn't doing it is just to keep me on my toes.

MR. PERCIVAL: Or awake.

Mr. Commissioner, one thing that troubles me and I have tried to gain some guidance from other counsel is where we are going in relation to this witness. I gathered the intention of Miss Cronk is to try and finish examination in chief of Dr. Freedom today. I understand that it is her desire to continue tomorrow.

THE COMMISSIONER: Yes. What we will do - incidentally I should say that I would like to quit at 10 minutes to 4:00 because I still have the remnants of another job that I still have to attend to from time to time and it starts at 4 o'clock.

MR. PERCIVAL: Yes.

THE COMMISSIONER: So I thought we wouldn't have a break this afternoon. We would just go from 2:30 till 10 to 4:00, and by that time



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presumably Miss Cronk will be finished but if she isn't finished what we would call the examination in chief isn't finished anyway because we have Mr. Scott and Mr. Ortved to deal with.

MR. PERCIVAL: Yes.

THE COMMISSIONER: And then we will proceed with the cross-examination by everyone tomorrow that we can get in, not of course including Jewish lawyers who won't be here.

MR. PERCIVAL: Yes. I have difficulties if it doesn't finish. If I don't get to the position of cross-examining tomorrow,
Mr. Commissioner, I have difficulty on Monday because I have to be in the Law Reform Commission of Ontario.

THE COMMISSIONER: I wonder - that seems like a good cause - I wonder if we could let him go first. Have you any views on that?

MR. SCOTT: I have no objection to that.

MR. ORTVED: No.

MR. SCOTT: If he will promise to look at the Inquiries Act when he said the Law Reform Commission, I would be doubly grateful.

THE COMMISSIONER: Yes. Have you any objection to that?



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MR. ORTVED: No, none at all.

THE COMMISSIONER: Then you can count on going probably not today but first thing tomorrow morning.

MR. PERCIVAL: All right. Thank you, Mr. Commissioner.

THE COMMISSIONER: Mr. Hunt, I didn't ask you. Is that all right with you?

MR. HUNT: Yes.

THE COMMISSIONER: Yes, Miss Cronk.

MS. CRONK: Thank you.

Mr. Commissioner.

Q. Dr. Freedom, during the six month period that we have just been reviewing and deaths that occurred on the cardiology ward between July and December of 1980 by the end of December there were a total of some 22 children who had died on those wards.

Can you tell me, Dr. Freedom, as at the end of December, 1980, to the best of your knowledge had a postmortem digoxin level ever been ordered in respect of a cardiac pediatric patient who had died on the cardiology wards?

- A. No.
- Q. Ilad you personally made a



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request for a postmortem digoxin level as at the end of December, 1980?

A. No.

Q. Doctor, referring briefly to the third morbidity and mortality meeting which you had told us was held on January 12th, 1981, we have had admitted as an exhibit before the Commission Exhibit 96, a series of handwritten notes that were prepared by Dr. Rowe and Dr. Jedeikin in preparation for that meeting.

To assist you briefly, Doctor, we heard in evidence that there was in addition some four children on Exhibit 96 - I will refer to the fourth page, Dr. Freedom - do you see the heading July 1980 to December 1980 on the fourth page?

A. Yes.

Q. All right. And do you see the circle on the left hand side of the page which appears under the notation "George Trusler's list"?

A. Yes.

 $\Omega$ . And immediately below that the entry "RMF addition". Beside that and circled the names Volk, Belanger, Lombardo, Gosselin.

Can you tell me, Dr. Freedom, do you have any recollection of being requested by Dr. Rowe



or anyone else to assist in the compilation of names of children whose deaths should be reviewed at the January 12th mortality meeting?

A. I don't have a specific recollection, you know, about these four names.

I know that Dr. Rowe often would request from me information about children that had complex heart disease or who had died. Unfortunately I wasn't at that January meeting so I just can't place that in the context.

Q. Thank you, Doctor. And similarly at the bottom of the same page there is an entry RMF provide 1 to 12 - and I take it to be month infant pms?

A. Yes.

Q. Can you assist me, Doctor,
do you have any recollection prior to the meeting of
January 12 of being requested to provide information
with respect to postmortem results for the benefit
of those who were to attend the meeting?

A. That was an ongoing request, Miss Cronk, since the time I was appointed to the Hosiptal, and again I just can't remember anything specific vis-a-vis this notation of Dr. Rowe.

Q. Thank you. Do you recall



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anything specific in that context in respect to the meeting of January 12th?

> Α. No.

Q. Doctor, if we could move to the death of Janice Estrella.

> Α. Yes.

Q. Who died at the Hospital on January 11th, 1981.

> Α. Yes.

As I understood your evidence 0. yesterday you had no direct involvement in the care or medical management of this patient during life at the Hospital?

> Α. That is correct.

Q. Doctor, were you made aware generally from time to time at the morning cardiology conferences as to Janice Estrella's condition after admission on the 11th?

A. Yes, and at the evening sign-out rounds.

After her death, Doctor, did you have an opportunity to review her medical record?

After the events of March of Α.

Q. Not until then?

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Q. I take it then, Doctor, at some point following her death you became aware of the antemortem digoxin levels that had been recorded in respect of this child?

> Yes. Α.

Did you become aware of those 0. levels prior to your review of the record in March of 1981?

> Α. Yes.

Can you help me, Doctor, as 0. to the best of your recollection when you first became aware of the levels that were recorded prior to her death?

A. Again there were several discussions among the staff and at sign-out rounds and with Dr. Walter Duncan who was the ward chief that this youngster was not doing well and had had elevated digoxin levels.

Do you have any specific 0. recollection as to the actual levels that were recorded that were discussed at those meetings?

Again it is a little bit difficult today because I have gone over the notes excuse me, the Hospital record - in depth. But if





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her life?

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I recollect it was in the 4's to 7, in that range. That is my recollection.

> This is during THE COMMISSIONER:

THE WITNESS: During her life.

MS. CRONK: Q. Doctor, to assist you the evidence to date has indicated in part from the biochemistry reports that are contained in Janice Estrella's medical record and in part from the digoxin books maintained by Dr. Ellis that were admitted as Exhibits in the preliminary hearing in the Queen versus Nelles and similarly have been admitted here, the evidence has been there were four antemortem digoxin levels recorded at the Hospital with respect to Janice Estrella. The first was a level of greater than 5 nanograms which according to Dr. Ellis' digoxin book ultimately resulted on further dilution in a reading of greater than 9.4 nanograms.

The second reading was one greater than 4.7 which onedilution was found to be 7.8 nanograms.

The third sample was insufficient for testing purposes according to the entry in the biochemistry reports, and the fourth, the sample



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obtained on January 9th, a level of 4.7.

Do those levels accord with your recollection as to what you understood the levels to have been during her life?

A. Again I have gone over the chart and I found one additional one on December 22nd of 1.5.

Q. Yes. I am sorry, Doctor, I was dealing only with those in January.

A. Okay. I'm sorry.

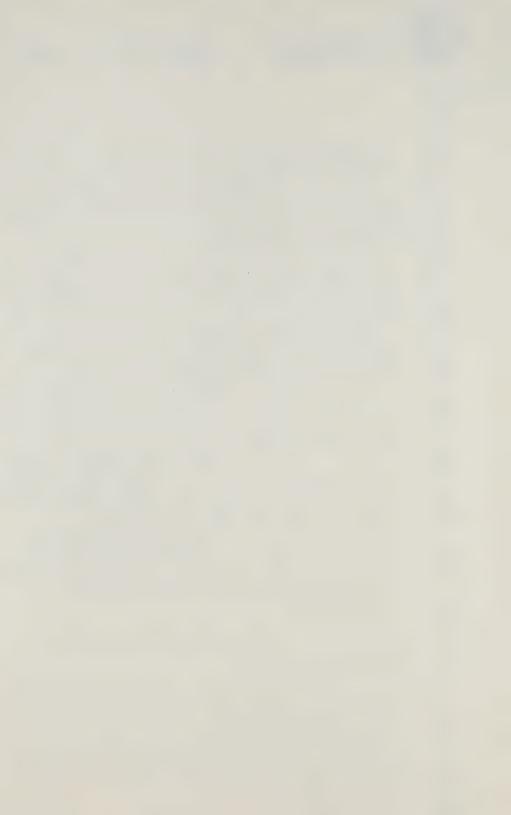
Q. You are quite right there was one on an earlier date of 1.5.

A. Well, again I don't remember back in December or early January of specific numbers. I was just told that they were elevated.

Q. Doctor, the Commission has also heard evidence concerning two postmortem digoxin level readings which were obtained in respect to Janice Estrella.

Could you turn with me, Doctor, to page 156 of the record.

We see, Doctor, on that biochemistry report at page 156 the recording of the date of a sample taken on January 11th, 1981. There is no indication on the biochemistry report as to the time



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at which the sample was taken or her sample type.

A. Yes.

Q. The number of the sample, however, is recorded as G89241 and a level of 72 nanograms was recorded.

Can you help me, Doctor, do you have any understanding or knowledge as to who ordered that postmortem digoxin sample in respect of Janice Estrella?

A. Well, I understand from previous testimony that Dr. Taylor obtained that sample at my request.

Q. Do you have any recollection today, Doctor, of having requested Dr. Taylor to obtain a postmortem digoxin level of Janice Estrella?

A. No, I have no recollection at all, Miss Cronk, of asking Dr. Taylor to do so.

Q. When you referred to prior evidence, are you referring to the evidence of Dr. Taylor at the preliminary hearing?

A. Yes.

Q. Excluding the case of Janice
Estrella, Doctor, I believe you told me earlier that
as at the end of December, 1980 you had not personally
ordered a postmortem digoxin level on any patient



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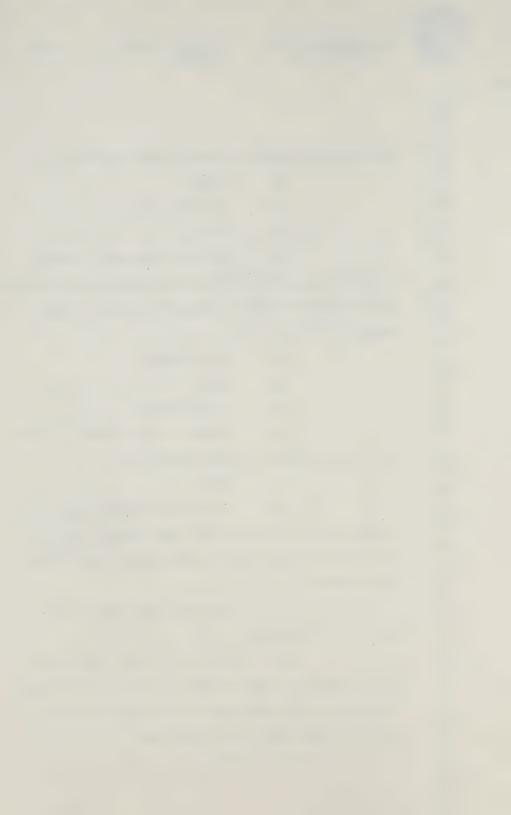
with which you were involved at the Hospital?

- A. Right.
- Q. Is that correct?
- A. Yes.
- Q. To your knowledge, Doctor,

as at January, 1981, did the biochemistry laboratories in the Hosiptal conduct postmortem digoxin level assays?

- A. For digoxin?
- Q. Yes.
- A. I don't know.
- Q. Doctor, with respect to this particular sample, whoever ordered it --
  - A. Yes.
- Q. -- and at whatever time it was ordered, would you agree with me, Doctor, that the level is an extraordinarily high level for a digoxin assay result?
- A. Certainly the number that is reported is very high.
- Q. Had you in your experience at the Hospital, Doctor, prior to the case of Janice Estrella had any experience with a digoxin assay result in the range of 72 nanograms?

A. No.



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Q.	Ве	it	post	mortem	or	ant

mortem?

A. No.

Q. Doctor, with respect to this level, could you help me as to when you first became aware that a postmortem digoxin level had been obtained on Janice Estrella at 72 nanograms?

A. About - I think it was about two or three weeks later I had a very casual conversation with Dr.Taylor.

He said to me what do you think of a digoxin level in Estrella of 72 and that was the first that I had heard of it.

Q. Do you recall the occasion of the discussion? Dr. Freedom, do you recall where you were when that discussion took place?

A. Again I have given evidence previously I thought it was in the autopsy room.

Q. All right. And when you say two to three weeks later, later than what?

A. After the child's death.

Q. After the child's death?

That would place the timing then of your discussion with Dr. Taylor in the latter part of January?

A. Yes. But again I am a little





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bit foggy on the time framework.

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THE COMMISSIONER: When you say the autopsy room, I take it was some other baby's autopsy. It wouldn't be --

THE WITNESS: Well, because my research interest is in cardiac anatomy I am often in the autopsy room.

THE COMMISSIONER: Yes, ves, but certainly this wasn't at the time of the autopsy of the child?

THE WITNESS: Correct.

MS. CRONK: Q. Well, to be clear, Doctor, did you attend the gross autopsy of Janice Estrella?

No, I did not.

Did you subsequently observe 0.

her heart?

Α. No.

0. Doctor, with respect to your discussion with Dr. Taylor do you recall today what you were informed by him with respect to this level?

He asked me in sort of a casual fashion what do I think of a level of 72 in Janice Estrella and my recollection of the conversation was that, Jesus, that value is so out of hand



that it is either a calculation error, a decimal error, a problem of biochemistry or perhaps a sample had been drawn from a contaminated source.

Q. Did you enquire at that time, Dr. Freedom, of Dr. Taylor as to the source of the sample and the method of its having been taken?

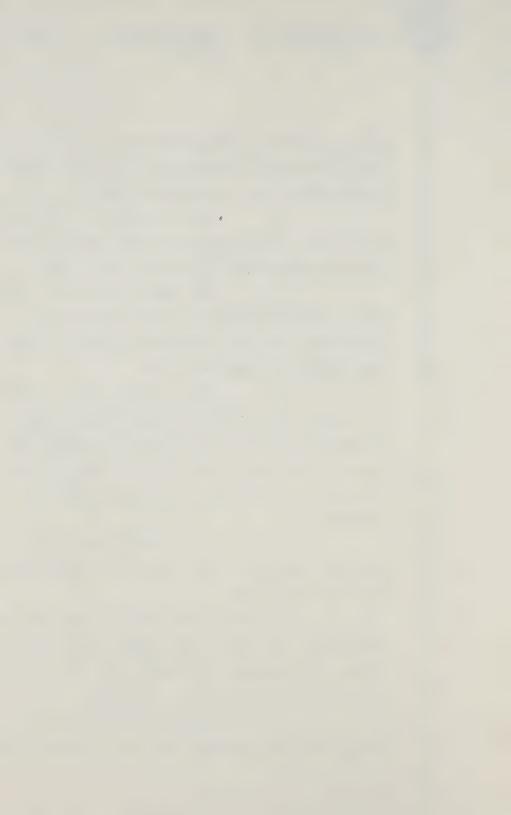
A. No. What I said to Dr. Taylor when I made those remarks was that I thought he should check back with biochemistry to see if there was a problem and get back to me.

Q. Do you recall, Doctor, whether the suggestion of an error having occurred in the biochemistry lab was an impression or reaction that you had at the time of hearing of the level or was it a matter of discussion between Dr. Taylor and yourself?

A. No, I think it was the first thing that came to my mind, Miss Cronk, when I heard of a level in the 70s.

I had recalled that this baby had had high levels, you know, in the 4 and 7 range, so when I heard 72 I automatically thought the first thing was a decimal point error, 7.2 versus 72.

Q. Would you agree with me,
Doctor, that had a decimal point error occurred such



that the true reading was 7.2, that level in itself was significantly higher than what would have been considered a normal therapeutic level for digoxin in a child of this age.

- A. Yes, I would agree with that.
- Q. And it would as well have been significantly higher than the last recorded digoxin level during the life of the child, 4.7, four days before she died?
- A. Yes. I would agree with that too.
- Q. Doctor, in respect of the -MR. SCOTT: Just to be clear, did
  Miss Cronk have that right or was the last reading
  greater than 4.7?

MS. CRONK: I had understood from page 159 of the biochemistry report, Mr. Scott, that the last reading, the sample was taken on January 9 and it resulted in a level of 4.7 from the venous sample.

MR. SCOTT: I am trying to get this whole case on one sheet of paper and I had it greater than 4.7.

THE COMMISSIONER: Well, you are right if you just went back one day, you would have



been right on the 8th. Apparently something went wrong with the machine between the 7th and the 8th because they could measure up to 5 on the 7th and only at 4.7 on the 8th.

MS. CRONK: As I understand it,
Mr. Commissioner, the reading on the sample taken
or one of the samples taken on January 8th resulted
in a reading of greater than 4.7 which when traced
to Dr. Ellis' digoxin books suggests that the further
diluted reading was 7.8 nanograms. That is January
8th.

There was another and differently labelled sample also drawn on January 8th, and that sample was an insufficient quantity for further assaying. And then we move to January 9th and the sample taken on that date was recorded at a level of 4.7.

Q. And, Doctor, I may have forgotten your answer. Is it also your view that had a typographical or decimal place error occurred such that the post mortem reading of 72 nanograms should in fact have been 7.2 nanograms, that that level as well was significantly higher than the last reported digoxin level during Janice Estrella's life?

A. Yes, but certainly more consistent with the numbers that had been recorded





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during life.

Although of course we know, Doctor, that on the day before her death when the level was recorded at greater than 4.7, that level -I am sorry, January 8th - that that level at greater than 4.7 resulted in a reading of 7.8 nanograms.

- Right.
- Doctor, did you yourself, having learned from Dr. Taylor of a 72 nanogram reading, check with the Biochemistry Department, be it Dr. Ellis, Dr. Soldin or any other individual involved with the laboratories to determine whether or not an error, a transmittal error or decimal error had in fact been made with respect to the reading?
  - No, I did not.
- Similarly, Doctor, did you have any discussion subsequent to your discussion with Dr. Taylor when he indicated to you the level of 72 had been recorded, did you have any discussion with any members of the Pathology Department or with Dr. Taylor to determine how and in what manner that sample had been obtained?
  - No. Α.
  - I understood from your earlier Q.



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evidence you did, however, suggest that Dr. Taylor
should review the matter to determine whether or
not a decimal error had taken place, to check with
the biochemistry people and determine how the sample
had been obtained. Is that correct?

Α. Correct.

Did Dr. Taylor subsequently 0. report back to you as to the result of those investigations?

No.

Do you know in fact,

Dr. Freedom, whether or not Dr. Taylor at your suggestion or request did speak to the biochemistry laboratory to determine if an error had obtained?

A. No, I do not. When I didn't hear back it dropped from consciousness.

Did you have any subsequent discussion then at all with Dr. Taylor in the weeks following your discussion that you think took place in the autopsy laboratory concerning the 72 nanogram level with respect to Janice Estrella?

I don't remember any of other conversation with Dr. Taylor about that level.

Q. Having heard of the 72 nanogram level from Dr. Taylor, Dr. Freedom, did you communicate



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that level or discuss that level with any other
member staff cardiologist or member of the cardiology
division, pediatric?

No, I don't believe so.

Do you recall having had any 0. discussion with respect to that level with Dr. Rowe?

> Α. I can't recollect a specific

Again my feeling at the time was that this level was absurd; that I had never seen such a level.

I was also well aware of how pathologists often take blood, and at the time, although I didn't have a discussion with Dr. Taylor, the following image came to my mind, and that is why I suggested they check to see it was drawn.

Many times when a pathologist draws blood from a heart they cauterize the surface of the heart with a hot blade which liquefies the heart muscle, and often they will stick their needle through the heart where they cauterized it to get blood for postmortem cultures and other things. So the image I had was that perhaps they had stuck the needle through liquefied heart muscle and that in some way could have given a funny reading, and that was



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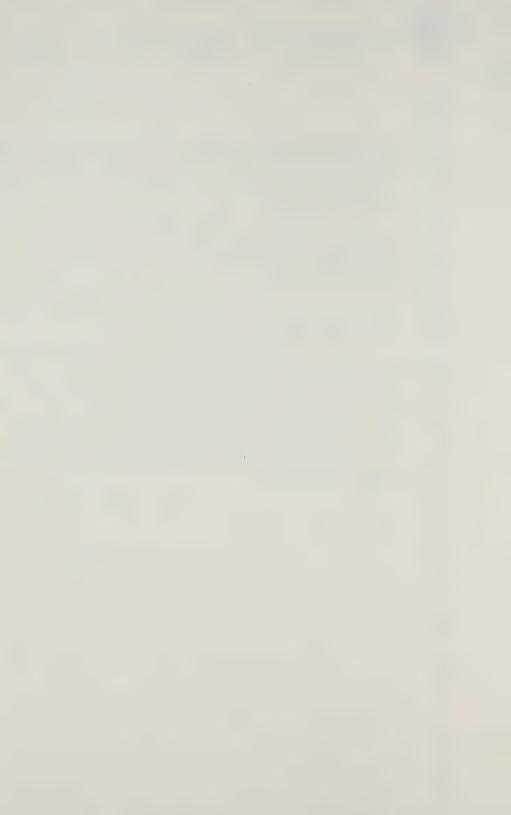
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sort of my perception, such, you know, contamination, check the way it was drawn and get back to me. But I never heard again.

Was that your perception, Dr. Freedom, at the time that Dr. Taylor informed you of the level?

Α. Yes. He didn't say, Miss Cronk, how he had drawn it or from what source.

He just said that he had drawn - what did I think of a postmortem sample of 72 and often that is the way I would have seen Dr. Taylor and other of the senior pathologists draw blood, and so that was my mental image of how the sample could have become contaminated.



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G DM/wb Q. What was Dr. Taylor's reaction to the level, as you understood it, during your discussion?

A. It was very matter of fact. He didn't seem specifically concerned. I never received a written memo from him about it. Again, I would think that things that would concern me, I often would put it in memo form. He asked me once, in a casual fashion, I made a comment back to him and I never heard again.

Q. Did Dr. Taylor, during your initial discussion with him, Dr. Freedom, seem concerned as well that the sample might have been contaminated?

A. It was such a quick and passing conversation, Ms. Cronk, I certainly didn't have that perception at the time that he had grave concern about this number.

O. Dr. Freedom, can you help me, having had the discussion with Dr. Taylor, at which time the level was -- you were informed of the level, having had the perception, I believe you indicated that the level might be contaminated and that there might have been a decimal error, or an error in the biochemistry laboratory, can you help me as to why you



did not follow up with Dr. Taylor and ask him for the results of the investigations you had suggested be made by him?

A. Yes, I think so. We will, occasionally, in clinical practice, see a level of potassium, for instance, as very high, nine, ten, eleven, where up to five is normal. Often, the blood is hemolysed, the level is checked as soon as that result is obtained, and the more normal level or appropriate level is obtained. I suggested to Dr. Taylor that he check back, it was he who drew it, he knew how it was drawn and under what circumstances and I felt that would be the appropriate course of action.

Ω. Did you, at the time, Doctor, have any impression that the -- if a level of 72 nanograms postmortem, as had been obtained, was reliable and an error had not been made, and contamination did not appear to have been the case, did you have any concern at that level that that would be a relevant factor in the death of that child?

A. Well, in Janice Estrella, she was very ill. She had not done well really, from the time of surgery, she had pneumonia, heart failure, all sorts of problems. Again, I don't think one needed



other reasons, I think there was a concern of Dr.

Duncan that this was a sick baby with this specific
type of malformation, as we had seen, the progress
was poor, there was pneumonia. So again, at the time,
I think we all had ample medical concerns that this
youngster died as a result of cardiac disease,
intercurrent infections in a baby with underlying
Down's Syndrome.

Q. Well, Doctor, fairly, would you agree with me that at the time that you were informed of that level, 72 nanograms, that that was an unprecedented level in terms of the height of the level for a digoxin assay, in your experience?

A. Yes.

Q. And were you concerned by the level once you were informed of it by Dr. Taylor?

A. Non particularly, I thought it was so obviously an error that when I didn't hear back from Dr. Taylor, as I said, it faded from consciousness.

Q. At the time you were told of the level by Dr. Taylor, Dr. Freedom, did you inquire, or did you have any impression, as to whether or not the death of Janice Estrella had been reported to the Coroner's Office?



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A. I don't have any specific recollection whether it was or was not.

Q. Was that a matter that you considered, having been informed of the postmortem level?

A. No.

Q. Dr. Freedom, presented in evidence before the Commission and marked as Exhibit 149 is a copy of the Zebra pack entries for Janice Estrella, and contained in the Zebra pack entries is an indication, several pages in, Doctor.

A. I don't seem to have that, Ms. Cronk.

Ω. I am going to give you this copy, Doctor. It is an entry for the 1st of January, 1980, and I take that to refer to 1981, at 3:00 a.m., apparently signed by Dr. Schaffer, indicating:

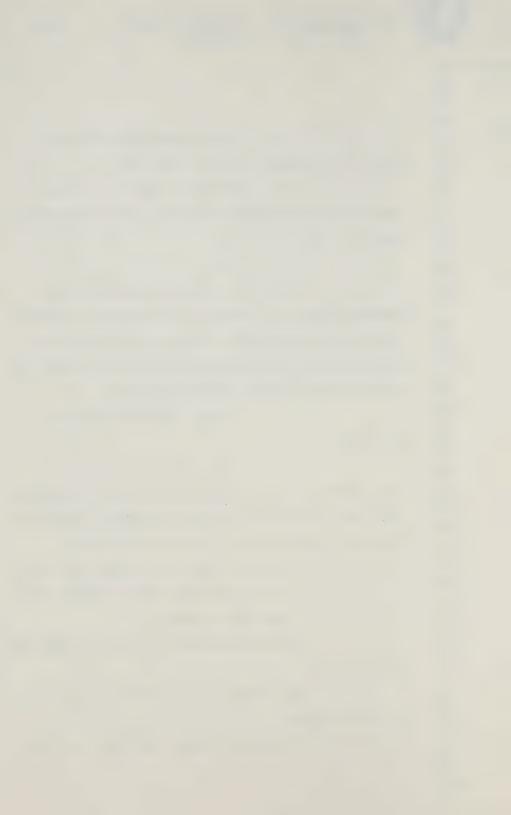
> "Coroner's Office notified, felt not to be a coroner's case, consent for post mortem agreed."

THE COMMISSIONER: I'm sorry, where do

I find this?

 $\label{eq:MS.CRONK:} \text{ It is several pages in,} \\ \text{Mr. Commissioner.} \\$ 

THE COMMISSIONER: How many from the



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beginning, there seem to be many pages in 149 that are just electrocardiogram, and after that ---

MS. CRONK: It is Exhibit 149 and it is the 13th page in, Mr. Commissioner. Do you see the page entitled at the top, "post-operative"?

THE COMMISSIONER: Yes.

MS. CRONK: Are you looking at the record, Mr. Commissioner?

 $\label{eq:the_commissioner} \mbox{The COMMISSIONER:} \quad \mbox{No, no, I'm sorry,} \\ \mbox{I'm looking at 149.}$ 

MS. CRONK: You are looking at 149?
THE COMMISSIONER: Yes.

MS. CRONK: You see the page marked, "post-operative", in large block letters?

THE COMMISSIONER: Yes, I saw that.

MS. CRONK: It is the next page.

Q. I'm sorry, Dr. Freedom, do you see that entry?

A. Yes, I do, thank you.

 $\mathbb{Q}_{\bullet}$  All right. Were you familiar with the Zebra pack entries on Janice Estrella after her death?

A. No.

Q. Had you had an opportunity to review it at any stage following her death?



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A. No.

Q. Do you have any knowledge,
Doctor, as to the reporting of this death to the
Coroner's Office, or as to whether or not it was, in
fact, reported as is indicated in the Zebra pack?

A. I have no knowledge, Ms. Cronk, other than what Dr. Schaffer put in his 3:00 a.m. note.

Q. Following your discussion with Dr. Taylor when you were informed that a postmortem digoxin level had been obtained, did you have any discussion with any of the attending physicians, or the physicians involved in the care of Janice Estrella as to whether the case was then, in light of the postmortem level, an appropriate or an inappropriate one to be reported to the Coroner's Office?

A. No.

Q. Was it a matter that crossed your mind, at the time, at all?

A. No.

Q. Dr. Freedom, can you help me as well, again referring to page 156 of the record, which is the biochemistry report, indicating the reported level of 72 nanograms. You will see a hand-written entry on the left-hand side of the page: "leg milked", and on the right-hand side of the page: "Mainly gutter



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"fluid", do you recognize that hand-writing, Doctor?

- A. No, I don't.
- Q. Do you have any knowledge as to whose hand-writing that might be?
  - A. No.
- Q. Doctor, as I mentioned earlier, there was, as well, a second postmortem sample, disclosed by the biochemistry laboratory reports, contained in the record of Janice Estrella. If you will turn to page 158, two pages later in the biochemistry report, you will see, a sample was drawn on January the 11th, 1981, again, no time for the drawing of the sample was indicated. A sample type on this page is not indicated. The sample number, however, is, and the level is recorded at greater than 4.7.

Again, Doctor, would you agree with me, that that level was potentially higher and considerably higher than a level of 4.7 recorded on January the 9th for Janice Estrella?

- A. I guess, Ms. Cronk, greater than 4.7 could be 4.8, but certainly it is greater than 4.7.
- Q. And, as has been said many times to date, we don't know how high up is.
  - A. Or how low.
  - O. We know that it is not less than



4.7, don't we, Doctor?

A. Yes.

Q. Can you help me, Doctor, as to when you first became aware that the second postmortem sample with the level of greater than 4.7 had been obtained on Janice Estrella?

A. Yes, I believe either you or

Mr. Lamek asked me if I knew there was a second level
and that was the first I had heard of it.

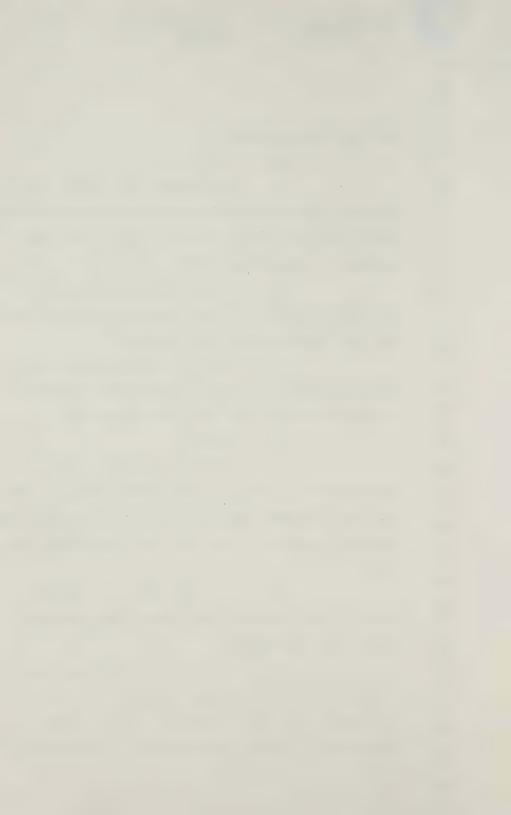
 $\Omega_{\bullet}$  So, prior to the commencement of these proceedings, you had no knowledge concerning a second postmortem level for Janice Estrealla?

A. Correct.

Q. Doctor, once again, having learned of the existence of the second level, do you have any knowledge which could be of assistance to us as to the identity of the individual who ordered the level?

A. No, other than as I stated already in my testimony here and at the preliminary inquiry of Miss Nelles.

Q. Doctor, as I understand your evidence, you said you recall having a discussion with Dr. Taylor, your recollection is, in the autopsy laboratory, at which time you were not informed of





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the level. You have also testified, if I understand it correctly, that you have no recollection of having requested Dr. Taylor to take a postmortem level on the Estrella child?

- A. That is correct.
- Q. Do you have any recollection of any discussion during your discussion with Dr. Taylor as to why that order was requested, or indeed, any recollection as to any discussion as to the circumstances under which it was ordered?
- A. Well, again, I have spoken to him after the events of March, 1981. He stated that he had called me on a Sunday morning, I believe it was Sunday morning and I just have no recollection of a phone call.
- Q. Doctor, during your initial discussion with Dr. Taylor when you were informed of the 72 nanogram level, I take it inasmuch you did not become aware of the second postmortem level until much more recently, that you have no recollection of any discussion at that time as to there being more than one postmortem sample on Janice Estrella?
  - A. Correct.
- Q. Did you subsequently receive, Dr. Freedom, after the death of Janice Estrella, a



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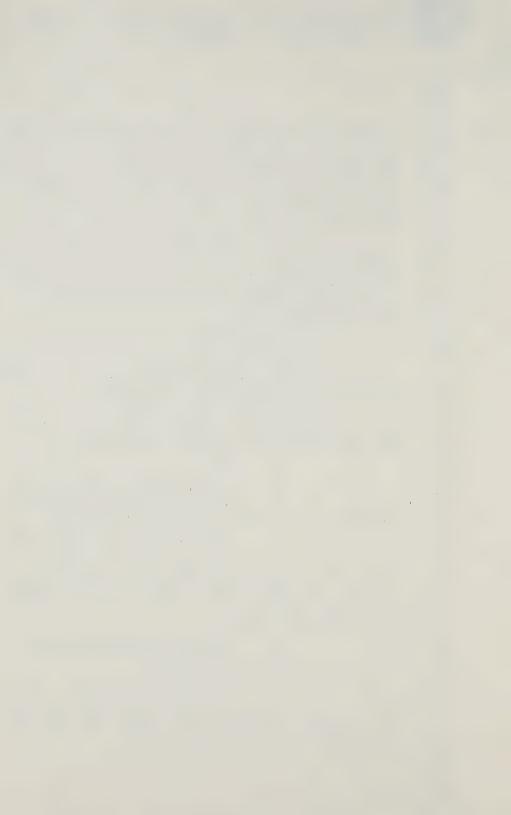
copy of the final autopsy report that had been prepared concerning her death?

- A. No, I don't believe I did.
- Q. Do you recall, Doctor, having seen a preliminary autopsy report in respect of Janice Estrella?
  - A. Not specifically.
- Q. Doctor, when did the matter of the postmortem digoxin level sample in respect of Janice Estrella next come to mind after your discussion with Dr. Taylor?
- $\hbox{A.} \qquad \hbox{I believe it was the weekend of}$   $\hbox{March the 21st.}$
- Q. Can you help me as to the circumstances that presented themselves such that you recalled, at that point, the postmortem level on Janice Estrella?
- A. Yes. I had been in the hospital on Saturday, doing a catheter study on two babies, one of whom was Justin Cook. I was on-call for that weekend, backing up Dr. Rod Fowler in the cath lab. Allana Miller had died early Saturday morning and I had called in Saturday evening, later in the evening, to find out if I had more catheter work, or could I take my shoes off. I was informed,



at that time, that Allana Miller, who had died early that day, had a sky-high digoxin level and the comment was made, there are now three high levels, Pacsai, Miller and Estrella.

- Q. Now, was that the first time,
  Doctor, subsequent to your discussion with Dr. Taylor
  at the end of January, that the Estrella postmortem
  level came to mind?
  - A. Yes.
- Q. Doctor, prior to that discussion in the evening of March 21st, and we will return to this, had you been made aware of the digoxin levels that were recorded in respect of Kevin Pacsai?
  - A. Yes.
- $\Omega_{ullet}$  Do you remember when you were informed of the digoxin levels on Kevin Pacsai?
- A. I think it was later that week, 18th, 19th, in that range, the 17th, I just can't remember the exact timing, I knew it was later that week before the weekend.
- $\Omega_{ullet}$  How did you become aware of the Pacsai digoxin levels, Doctor?
- A. I think we were having, assigned our rounds, or a meeting, and Dr. Fowler had mentioned Baby Pacsai had a high digoxin level.



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		Q.		Did	you	underst	cand	that	to	be
L	high	antemortem	or	high	post	tmortem	leve	21?		

- A. I didn't have any understanding other than it was a high level, and I wasn't sure, at that time, whether it was during life or after life.
- $\Omega_{ullet}$  Was the number of the level itself mentioned in that discussion?
- A. I can't remember now. Again, I know what the number is, but at the time, just a very high level.
- Q. And at the time that that level was mentioned to you by Dr. Fowler, Dr. Freedom, I take it, on the basis of your evidence, that the Estrella postmortem level did not come to mind?
  - A. I didn't think of it at all.
- Q. In the intervening period between the death of Janice Estrella and the death of Kevin Pacsai, had any other digoxin level of a high or significant level come to your attention?
- A. I can't remember when McKeil died, that was in October. No, McKeil had somewhat elevated levels during life, but no other one from Estrella.
- Q. In the course of your discussion with Dr. Fowler with respect to the levels that had



been obtained on Kevin Pacsai, Dr. Freedom, did you gain the impression, or the understanding, that the Pacsai level was indeed a high one?

A. Yes, I said that already. I don't recollect exactly how high he said, but I certainly remember it was high.

Q. Doctor, Dr. Rowe, during the course of his evidence, testified, and I refer my friends to Volume 16, page 2711, that he learned of the postmortem digoxin level on Janice Estrella, the level of 72 nanograms, at the time when the final autopsy report concerning her death was received, which he thought to have been the second week in March of 1981.

He testified further at page 2711, upon learning of the postmortem digoxin level of 72 nanograms in respect of Janice Estrella, that he requested you to look into it a bit further, to check it out, and to inquire -- I'm sorry, the reference is:

"I thought it was most likely to be explained by one or other of those points, and I think we talked about it a little and suggested we get Dr. Freedom to look into it a bit further. Perhaps check out -- and he did have



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think	he	has	test	cifie	ed a	bout	pre	evi	ousl	У
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	-		,				7 7			_

Doctor, do you have any recollection of Dr. Rowe, on or about the second week of March, 1981, requesting you to check into the postmortem digoxin level reading that had been obtained in the case of Janice Estrella?

A. No, I do not. My mother had died the preceding week and I had flown to Los Angeles on, I think it was Saturday, March the 6th, coming back late the evening of March the 12th. I was at work on Friday the 13th, and I don't have any specific recollection of either Dr. Fowler nor Dick Rowe saying to me, would you check back into that level.

- Q. Well, indeed, Doctor, if you first became aware, as you have told us, of the Pacsai levels, during the evening of March 21st ---
- A. No, I didn't say Pacsai, I said Allana Miller.
- Q. I am sorry, if the Allana Miller postmortem digoxin level first came back to your mind during the course of discussion on March 21st, can you tell me whether you have any recollection of a



discussion	with	Dr.	Rowe	prior	to	March	21st,	
concerning	the	postr	morter	m digox	kin	levels	realized	01
Janice Est	rella	?						

A. I have no recollection, Ms.

Cronk, of any conversation with either Dr. Fowler nor

Dick Rowe about that Estrella level. And, certainly

after the events of that weekend I do, but not before.

Q. When do you recall first discussing the matter of the Estrella digoxin levels with Dr. Rowe?

A. It must have been Sunday or Monday after Cook had died.

 $\Omega_{\bullet}$  You are referring to Sunday, March the 22nd or Monday, the 23rd?

A. Yes.

O. Can you help me as to what your observations were at that time with Dr. Rowe, as to the significance, if any, of the postmortem dig level?

A. Well, I think that, in view of the events of the weekend, I certainly had more concern about that level of 72.

A. I had concern that, again, our, my understanding of what a digoxin level after death



has changed considerably since the events of March,

1981, but based on my knowledge back in 1981, in March

During the course of your

of 1981, I felt, if a digoxin level after death

that was 72 carried the same connotation of a level

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Doctor?

Ms. Cronk.

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discussion with Dr. Rowe on either the 22nd or 23rd of March, did you raise with him, or did he raise with you, the possibility of contamination of the sample?

A. I can't remember, Ms. Cronk, when contamination was raised by Dr. Rowe. I had certainly felt, back in January, that this was one possible explanation.

Q. During the time of your discussion on March 22nd or March 23rd with Dr. Rowe, did you yourself raise with him the possibility that

that sample might have been contaminated?

during life, there was a problem.

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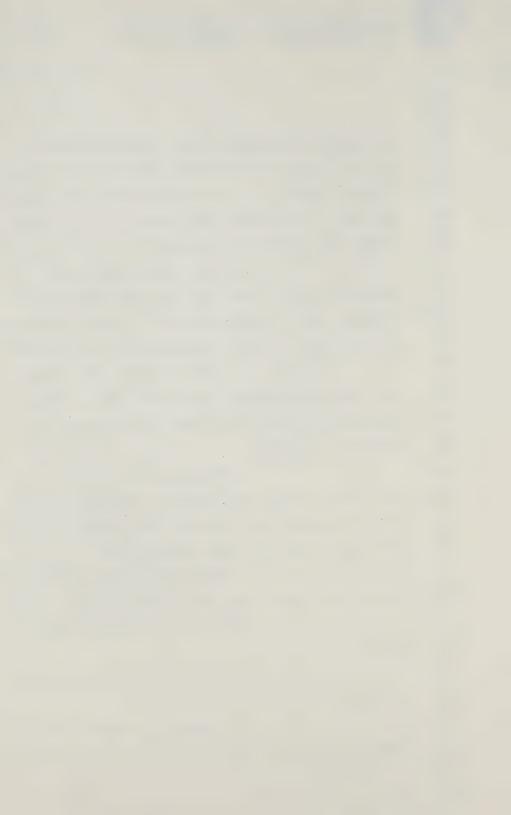
Q. Do you recall today doing so,

A. No, I don't recall either way,

I certainly may have because it

Q. And similarly, during your discussion with Dr. Rowe on the 22nd or 23rd of March,

was the same thing I felt when I spoke to Dr. Taylor.



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do you recall raising with him, or do you recall his raising with you, the issue as to whether or not there had been an error in the biochemistry lab with respect to that sample?

A. Again, I can't recall specifically, but certainly that had been my concern back in January. I think that as one tried to place into perspective the Estrella number, vis-a-vis what we now knew with Allana Miller and with Justin Cook, of course, we had concerns that it was more than a lab error.

Ω. Doctor, in that entire period of time, that is from the end of January, when you first had your discussion with Dr. Taylor about the level, until the evening of March 21st, when that level again came to your mind, had you had any further discussion with any member of the Pathology Department, or any discussion at all with any member of the biochemistry lab, with respect to that level?



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Well, I know I didn't have any Α. discussion Ms. Cronk with the biochemistry labs and I can't remember any other conversation with a member other than Dr. Taylor.

MR. SCOTT: Mr. Commissioner, I would just like some quidance and a ruling if possible. We are concerned that this part of the Inquiry with what you can find out about how the babies died, it is conceivable that this line of questioning is appropriate in Dr. Rowe's case because he gave a background for the whole Inquiry. It seems to me that it is not appropriate in Dr. Freedom's case and I don't intend to cross-examine about it unless I am told that this is going to be relevant.

THE COMMISSIONER: I won't tell you that because I'm having great difficulty with the relevance of this.

MR. SCOTT: Now, it may be relevant in stage two in some fashion, but even I will have to leave that.

THE COMMISSIONER: Well, I will hear from Ms. Cronk. Where are you leading with this other than to say that they perhaps should have discovered something earlier or should have taken some steps earlier?

MS. CRONK: Mr. Commissioner, I make

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no suggestion nor do I encourage any inference in that regard. I have completed my questions with respect to the post mortem level.

THE COMMISSIONER: I know you have completed them but now I am going to have to worry about the cross-examination because Mr. Scott is going to harass me about that too if anybody goes into the subject.

MS. CRONK: The entire purpose,
Mr. Commissioner, in eliciting, in posing the
questions and eliciting these responses from
Dr. Freedom is simply to establish the circumstances,
at least, this witness' knowledge as to the
circumstances under which the sample was ordered,
the purpose for which it was ordered, the significance,
if any, to which he attached it.

THE COMMISSIONER: Yes. He says he has no recollection of having directed that it be ordered. He was informed that it was at an astronomical level and he dismissed that as some error.

MS. CRONK: Indeed, Mr. Commissioner -THE COMMISSIONER: Do we need to know
any more than that?

MS. CRONK: And we heard Dr. Rowe's evidence as well concerning the issues as to the



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possible lack of reliability that could be placed on that sample and I was interested to pursue with Dr. Freedom his understanding of the basis upon which it could be said that that sample may or may not be unreliable and that I have now done.

THE COMMISSIONER: Again, I don't wish to be insulting, but he is not an expert on the taking of digoxin levels and the validity of them, at least, you are not, are you, Doctor?

THE WITNESS: I would agree with that entirely, Mr. Commissioner.

THE COMMISSIONER: So, I don't think he can really help us much. We are going to have a whole pack of pharmacologists come at us.

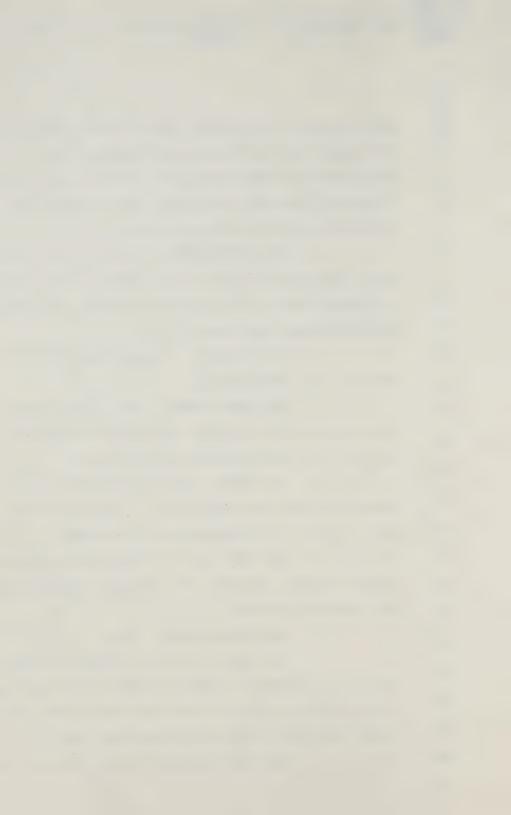
MS. CRONK: Mr. Commissioner, I am content to leave the matter there. The purpose was not to elicit his interpretation of the level.

MR. PERCIVAL: It may become relevant tomorrow because certainly the matter of contamination was raised by Dr. Rowe.

THE COMMISSIONER: Yes.

MR. PERCIVAL: And I would certainly want to know from this witness whether or not that was, so far as my clients are concerned, whether that was raised and this is directly in line with that.

THE COMMISSIONER: Well, that may not





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be though, as Mr. Scott says, it may not be relevant in this particular aspect.

MR. PERCIVAL: Well, I don't know whether everybody is going to be called back the second time or not. I mean, I have not heard a ruling in relation to that, Mr. Commissioner.

to rule against calling everybody back but I don't seem to have any chance. Mr. Lamek has conducted this thing in this manner. If you can satisfy me that it has some relevance to this particular aspect, that's fine. If you can't satisfy me on that - if you can satisfy me that it has something to do with the second aspect we'll call them, as much as I hate the thought, but we will and we will limit the cross-examination to that aspect.

MR. SCOTT: Well, I'm here, I'm instructed to be on my best behaviour and, so, I just want to serve notice that I don't intend to cross-examine with respect to these matters in this phase unless you rule, sir, that it is relevant to how the babies died.

THE COMMISSIONER: No. Well, I have been asking Miss Cronk how it is relevant and I have not with respect been satisfied that it is relevant yet.



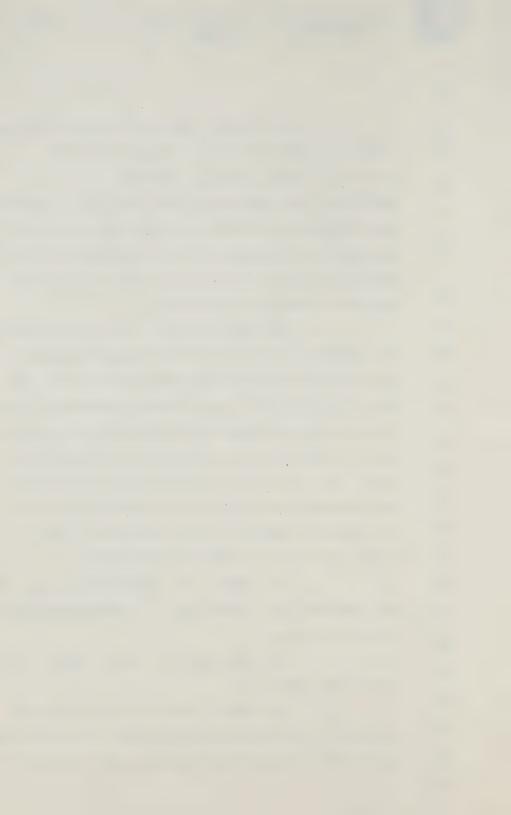
MS. CRONK: Well, Mr. Commissioner, as I say I am content to leave it there. The only relevance I suggest to you is whether or not significance was attached to the level by Dr. Freedom that influenced his view as to the cause of death of this child or indeed whether the information which he possessed caused Dr. Rowe to alter his opinion as to the cause of death of the child.

THE COMMISSIONER: It may conceivably have something to do with the investigative process but I don't see how that has anything to do with the cause of death. We've got to determine what the cause of death was, or attempt to determine what the cause of death is, based upon all the evidence that we have heard. The fact that Dr. Freedom may or may not have had information and may or may not have appreciated its importance back in January, February or March doesn't seem to me to bear on that subject.

MS. CRONK: Mr. Commissioner, I am in your hands and, as I have said, I am content to leave the matter there.

THE COMMISSIONER: Okay. Well, I will accept your offer.

MS. CRONK: With some relief to you no doubt Dr. Freedom, may we move then to the case of David Leith. You told us yesterday, as I understood





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- Correct. As a matter of fact, if A. there are any specific questions on Leith I have not reviewed that chart in depth at all, Ms. Cronk.
- The only point that I wish to establish for the record. Dr. Freedom, as I understand it you did perform the cardiac catheterization on that child?
  - Is that right? Α.
  - Do you recall doing that? 0.
  - I do a lot of catheters, Ms. Α.

Cronk. Why don't you help me out, what page?

- Q. Well, Dr. Freedom, I would be glad to help you out. Can I refer you to page 109 of the record, please?
- 109. Thank you, Ms. Cronk, you're Α. right.
- 0. Okay. Doctor, I am certainly not asking you to undertake a review of this record and I understand that you haven't recently done so. But for the purposes of the record and to make it abundantly clear, following the conduct of the catheter procedure on this child on February 1st, 1981, did you have any direct involvement in his care and management



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during life?

- A. No.
- Q. All right. Did you, Doctor, subsequently attend or participate in the gross -- I am sorry, in cardiology conferences at which the circumstances of his death were discussed?
  - A. Yes.
- Q. Did you as a result of that participation at any time form an opinion as to the cause of his death?
- A. I felt it was due to the specific heart malformation that this baby had. Indeed, I had been interested in this very unusual type of heart malformation and had written several medical papers on the subject. We have almost no long term survivors of this type of disease and in discussion with the ongoing staff and ward chief I felt that the baby died with congestive heart failure secondary to his unusual form of left heart hypoplasia.
  - Q. Doctor, I don't wish to be unfair to you and I recognize that you haven't had an opportunity recently to review the record. May I simply ask you, are you today not having had the opportunity to review the record, familiar with the terminal events of this child?
    - A. I am not familiar but I will, if



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you would like, Ms. Cronk, I will review the chart this evening.

THE COMMISSIONER: Well, I wonder, before you do that --

MS. CRONK: Q. Well, I don't think that that is necessary, Doctor. My only purpose in asking the question was to, in light of the opinion which you have just expressed that I gathered you formed at the time of the child's death, whether in your view any of the terminal events recorded in the record --

THE COMMISSIONER: Remember, he hasn't studied it now. He hasn't looked at it, so, he can't answer the question unless you make him study it.

MS. CRONK: Well, I am not asking him to review the record, Mr. Commissioner, and with your indulgence for just a moment. My question was merely going to be whether or not any of the terminal events recorded for the child played a part or formed a basis for you in reaching your opinion as to the cause of his death?

THE WITNESS: I think to backtrack just a little bit, Ms. Cronk. I have not reviewed the chart as I have said, but having been specifically interested in this type of rare cardiac malformation where I don't believe we have any survivors beyond a few months, that



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influenced me at the time of the catheter study more than almost anything else. So, I would have to review the chart at your pleasure to respond to any other questions.

MS. CRONK: Q. Well, I am not asking you to do that, Doctor, the extent of your involvement is now clear with this child.

A. Right.

Q. Similarly, as I understand it, you had very little if any direct involvement in the care and management of Keven Pacsai during his life?

A. I had nothing to do with Kevin

Q. All right. Indeed, did the death of Kevin Pacsai at the point in time on March 12th, 1981 coincide with the period of your absence from the City which you described a few moments ago?

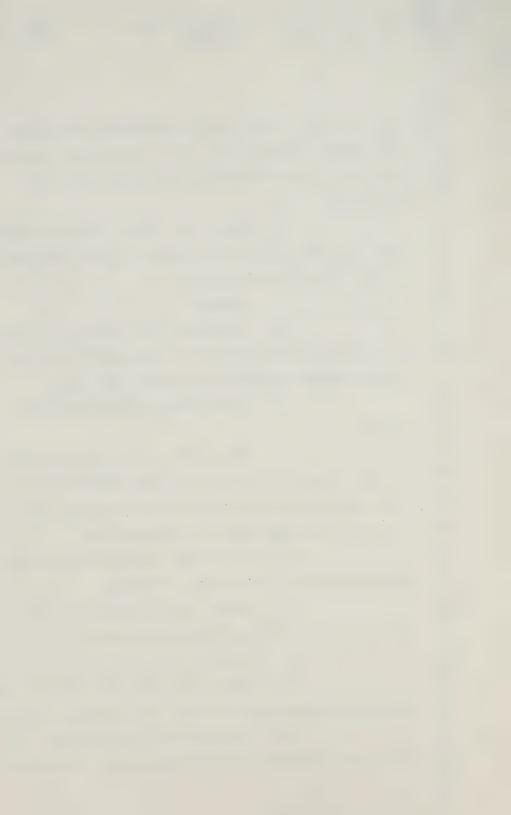
A. Yes, I had returned that evening, the 12th, which I believe was a Thursday.

Q. Right. And I believe you said you were back on duty on the 13th of March?

A. Correct.

Q. Right. Do you recall at that time, Doctor, being made aware of the death of Keven Pacsai?

A. I can't recall specifically. I know when I came back my desk was terribly crowded with



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correspondence and other patient materials that had backed up from the week I was away. So, I presume we were informed as of the usual work conference but I can't make any specific recollection.

Q. The autopsy of Keven Pacsai, as I understand it, Doctor, was conducted on March 13th, which I take it would have been your first day back at work after your absence?

- A. Correct.
- Q. Did you attend the gross autopsy of the child?
  - A. No, I didn't.
- Q. Doctor, could I refer you perhaps the Registrar would be kind enough to provide
  to you a copy of Exhibit 110.
  - A. Is that the Pacsai chart?
- Q. No, sir, it is not. It is a memorandum prepared by Dr. Fowler dated March 20, 1981 concerning the death of Kevin Pacsai. This memorandum, Dr. Freedom, reports upon the death of Kevin Pacsai and some of the circumstances surrounding his death and concludes on page 2 in the concluding paragraph that:

"Dr. Freedom, Head of the Pathology Section of our Division, has agreed to set up a pathology conference on



"this patient as soon as the microscopic findings are available and we will invite the Coroner, Dr. Tepperman, to attend."

Do you recall, Dr. Freedom, upon your return to Toronto in learning of Kevin Pacsai's death of being requested by Dr. Fowler or by Dr. Rowe to arrange for the holding of a pathology conference to be directed to the issue of this child's death?

- A. No, I do not.
- Q. To your recollection, was any pathology conference on that issue arranged and held?
- A. No. I believe that I saw this memo from Dr. Fowler some time after the events of that weekend of March 21st and it was my understanding that the Pacsai youngster as well as the others were under police investigation.
- Q. Had there been a pathology conference arranged, Doctor, specific to the death of Kevin Pacsai, would you have expected in the normal course that you would have participated in those discussions given your cross appointment?
  - A. Yes.
- Q. Doctor, if we may move then to the death of Charlon Gardner who, as I understand it, was admitted to the hospital on the 13th of March and



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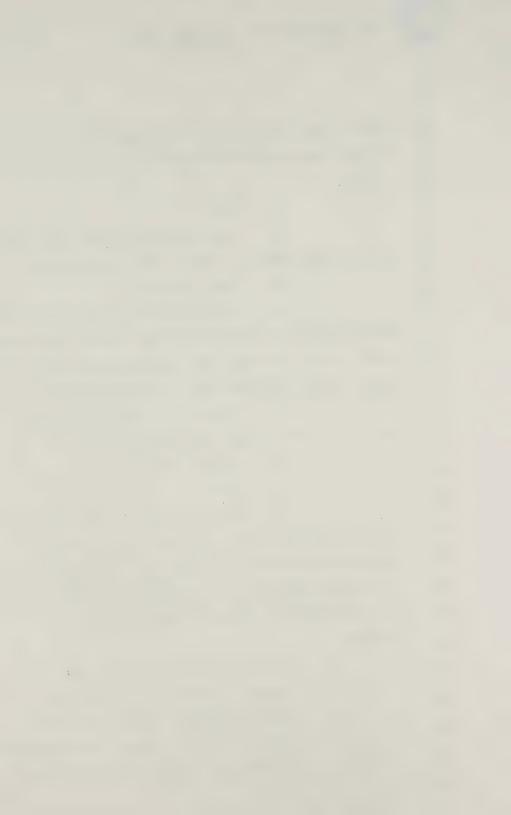
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died on the 18th of March. As I understand it, you did have some direct involvement in the care of this child?

- Α. Yes.
- O. Was the patient referred to you in the first instance, Doctor, for consultation?
  - Yes, Charlon was.
- Q. And if we turn to page 11 of the record do we see at that page your initial reporting letter to the referring physician concerning the result of your examination on Charlon Gardner?
- Let me see, I am trying to get Α. some of my notes ready. That was page 11?
  - Page 11, Doctor. 0.
  - Α. Yes.
- 0. And if we turn to the second page of your reporting letter, Doctor, in the summary section, you note that the baby has a very severe form of pulmonary atresia with a ventricular septal defect with non-confluent pulmonary arteries; and you continue:

"At the present time this baby's pulmonary blood flow is entirely ductus dependent and for this reason must continue to receive prostaglandins. The surgical management here is also



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"very difficult. It would be difficult to perform a left sided shunt because this would require cross-clamping his small left pulmonary artery and this would certainly lead to the baby's death." You then go on to propose that the

baby's right chest should be explored and you conclude:

> "I plan to discuss it within the next 24 hours with the surgeons and I will get back to you."

I take it, Doctor, from the addendum to your letter at the bottom of page 2 that in fact her case was discussed at the surgical staff conference and the consensus of opinion reached at that meeting was that the overall look for the child was very poor?

- Α. Correct.
- Is that correct? 0.
- Yes.
- And, in addition, you have 0. reported that as a result of the surgical conference discussion that an exploration of her right chest would be undertaken as you had initially proposed would be appropriate?





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Q. Right. Doctor, as I understand it, you subsequently conducted, following your initial examination of the child, a catheter study on the child. Is that correct?

A. I believe, Ms. Cronk, a catheter study was done. I don't believe I did this one.

Q. All right. And the results of that catheter study, whether or not you participated in it, formed a part of the report?

A. Yes.

Q. To the referring physician,
Dr. Garfield, as set out in your reporting letter of
March 16th?

A. Correct.

Q. Right. Doctor, if we turn to -I'm sorry, Doctor. Following the performance of the
catheter study on this child, Doctor, did you follow
her course while she was on the ward?

A. Yes. I don't believe again, Ms. Cronk, I was Ward Chief but I do remember again having a specific interest, not just Charlon as my patient, but I had been particularly interested in this very rare unusually lethal situation of non-confluent pulmonary arteries.

Q. In your experience that was a very





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rare condition and this child suffered from it?	rare condition an	d this child	d suffered	from	it:
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A. Correct. As a matter of fact, I have just recently reviewed the entire listing of all patients seen since the Heart Unit was established at Sick Children's and I believe we found 12 patients in 40 years.

Q. Doctor, as I understand it,
Charlon Gardner died on March 18th at approximately
4:30 a.m.?

A. Yes.

Q. And an autopsy was conducted on the same day. Did you attend the gross autopsy of this child?

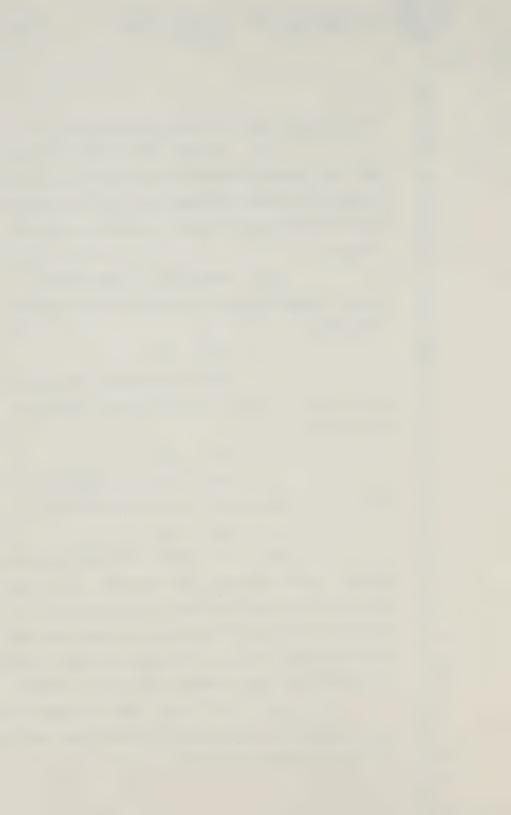
A. Yes, I did.

Q. Did you have an opportunity at that time or subsequently to observe her heart?

A. Yes, I did.

Q. As a result of those observations, Doctor, and the knowledge that you had of her clinical and anatomical condition based on your personal examinations of her in the catheter study which had been conducted, did you, following her death, formulate an opinion as to the probable cause of her death?

A. Yes, I felt that this baby died as a result of her severe heart disease with aspects of hypoxia and heart failure.



And did you subsequently, Doctor,

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receive or obtain a copy of the preliminary and final autopsy reports on the child?

A. Yes, I did.

Q.

Q. Did the findings disclosed in those reports cause you to alter or change in any way the opinion you had previously reached concerning the cause of her death?

A. No. Indeed, it corroborated that there was a clot formed in her pulmonary artery, thrombus, and, again, I was very sad that this youngster died. I had hoped that we might be able to do something for Charlon but with the caveats I set forth in my letter to Dr. Garfield.

Q. Doctor, as I understand it, this child was digitalized following admission at the hospital and maintenance doses of digoxin were administered thereafter?

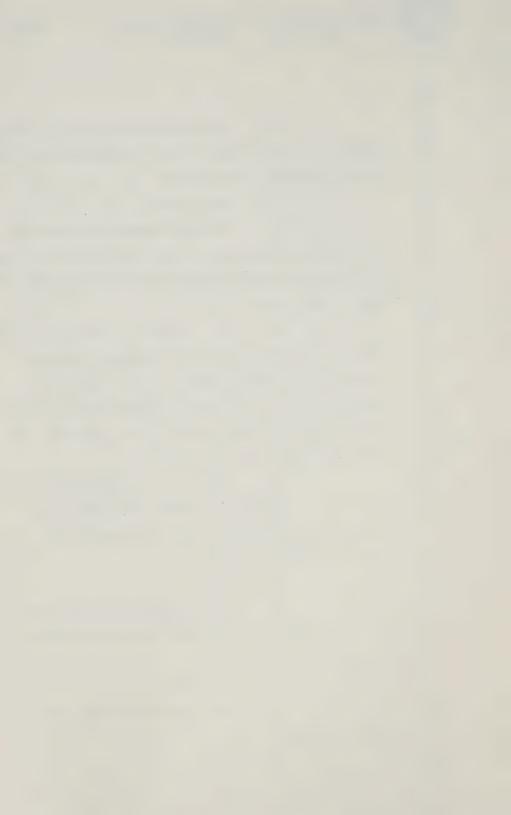
A. Right.

Q. Until I believe the evening of March 17th, the last dose she received was that evening?

A. Correct.

Q. Does that accord with your

A. Yes.



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Q. At the time of considering her death and at the time of attending the gross autopsy and observing her heart, Doctor, did you consider at that time whether or not digoxin intoxication had contributed to or afforded an explanation for her death?

A. I think as we have discussed before, there is nothing specific about a way a baby dies with or without digoxin. I felt this baby

Charlon Gardner had very severe heart disease and most sadly enough a most rare type of malformation, or just the malformation itself precludes doing something that is often done, that is, a shunt, and I felt that with the heart failure, with the discontinuity between the lung arteries that this is why the baby died.

So, I did not consider digoxin specifically at that time. The baby had a normal dosage for Charlon's weight. Also, we were fortunate, I think from September, 1980, we had had a clinical pharmacist assigned to our floor who oversaw the propriety of drugs and she would often make rounds with us and call our attention if she thought there was any difficulty with drugs; not just digoxin, mind you, antibiotics, diuretics. So, again, Charlon was taking the appropriate dose of digoxin. There was severe disease and I felt that Charlon's death was



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a	combination	of	both	hypoxia	and	severe	heart
fa	ailure.						

Q. Doctor, could I ask you to turn to page 29 of the record?

> Α. Yes.

Q. To a letter over your signature addressed to Dr. Garfield dated March 19, 1981?

> Α. Yes.

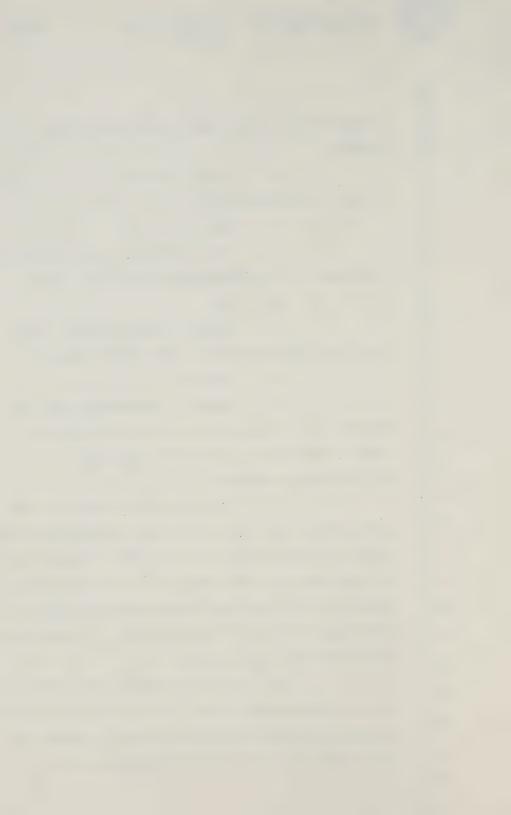
Which I take to be your final reporting letter concerning this child's death?

Correct.

Doctor, I understood you a few 0. moments ago, please correct me if I am wrong, to suggest that in part the child's death was attributable to hypoxia?

A. Well, you know, certainly what I just said, I think that there was a combination, and perhaps my letter would have been more helpful, to Dr. Garfield, if I had stated 'It is unlikely that hypoxia was the sole contribution, was certainly a major aspect of heart failure as well'. I think that would have been appropriate.

You're referring now, Doctor, to the third paragraph of your letter to Dr. Garfield at which you indicate you have previously reported in your letter as to the results at gross autopsy?





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Q. And you indicate particularly:
"We did not find any source of
bleeding or obvious infection and
in view of the widely patent left
ductus it is unlikely this was a
hypoxic death."

A. In itself. I think that as one looked over the chart, and I can't remember Ms. Cronk if at the time I dictated this letter I had the chart, again, I usually try and have it at my desk, that there was certainly a concern about the level of oxygenation in this baby and that's why they were considering a shunt. But there was also heart failure and I think perhaps the letter was not explicit in that sense.

Q. And I take it, Doctor, that in addition to the heart failure itself, you did consider that hypoxia had formed a part in this child's death?

- A. Definitely.
- Q. All right.
- A. Again, the youngster was being considered for a shunt despite all the risks that we had talked about or, excuse me, that I had mentioned in my earlier letter.



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Q. Doctor, are you familiar with the terminal events sustained by this child?

A. Yes.

Q. In your view, Doctor, were any of the events suffered by her immediately before and following her cardiac arrest prior to her being pronounced dead, are any of those events or symptoms consistent in your view with digoxin intoxication?





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A. Again I find it difficult to, you know, verbalize it.

I think as one looks at babies dying,

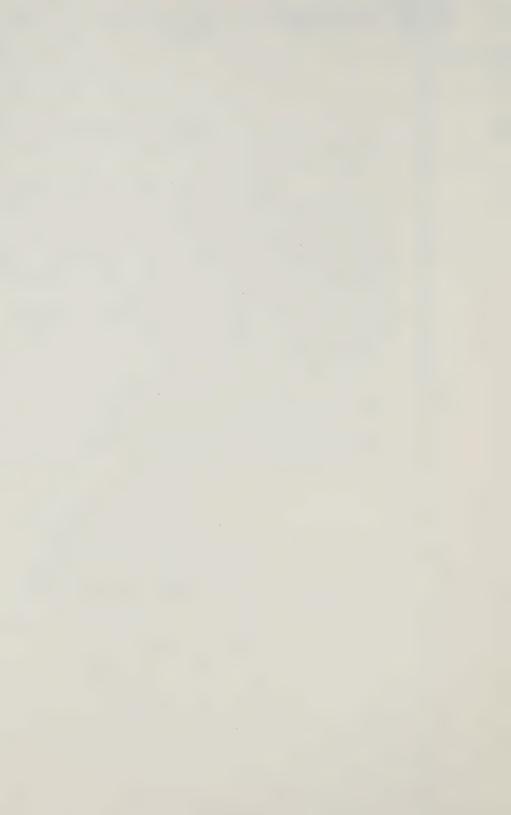
I don't think there is anything specific about babies
dying with digoxin versus no digoxin. I felt this
baby had severe heart disease of a rare type. I felt
there were contributions from heart failure and
hypoxia and I did not consider, you know, digoxin
intoxication as a cause of death. I am not sure
I have answered your question.

Q. Well, Doctor, I am now in some difficulty again because of your suggestion that there appears to be no difference between the way children die with digoxin or without digoxin.

A. Yes.

Q. In light of our - of your evidence earlier this morning, I take it we can agree, however, that there are some symptoms which are commonly known in the medical profession to be or believed to be directly attributable to the effects of digoxin intoxication or digoxin toxicity.

A. Well, the reality, Miss Cronk, is that a sick baby can have bradycardia, can have vomiting, can have lethargy, can have everything, you know, that we have discussed and not be on



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digoxin. So when one hears about a baby who has, you know, these findings, I think obviously the focus of this forum was digoxin responsible for some of these babies.

THE COMMISSIONER: No, that is not the question. That wasn't the question you were asked. The question was asked if, if, you have to assume that the baby died of digoxin poisoning, would the symptoms of the death, the manner of the death be consistent?

 $\label{eq:themosphere} \mbox{THE WITNESS:} \qquad \mbox{Is that the question?}$  I am lost.

THE COMMISSIONER: That is not the way it was put. It may not be a very eloquent way of putting it. I don't think - Dr. Rowe had no trouble with that question and he would say yes it was, so it was consistent with digoxin and it was consistent with the symptoms, would he not?

MR. SCOTT: Mr. Commissioner, it is a difficult --

THE COMMISSIONER: Sorry, it is getting close to one o'clock. I wanted to bring this to an end, that is all.

MR. SCOTT: Well, it is a difficult and serious point. Dr. Rowe did say it was consistent



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with digoxin toxicity, but you will also recall that he said, and it may be with Miss Cronk the effect of this hasn't been absorbed, that the same symptoms were consistent with 14 other methods --

THE COMMISSIONER: Yes, I understand

14 other methods of MR. SCOTT:

THE COMMISSIONER: I understand that,

MR. SCOTT: Isn't that where the confusion is? Miss Cronk is trying to say that these are more likely to be digoxin deaths because of bradycardia or because of --

MS. CRONK: Well, with respect, Mr. Scott, that is not the question I put to Dr. Freedom.

THE COMMISSIONER: Can I just put that question then? This is going to be the most leading question and I want you to answer yes to it.

THE WITNESS: Yes.

THE COMMISSIONER: Well, I think that disposes of that question.

MS. CRONK: Mr. Commissioner, on that note may we return to Charlon Gardner after lunch?



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THE COMMISSIONER: Yes, I guess we

MS. CRONK: I thought he had disposed of the question. I am sorry.

THE COMMISSIONER: I think the question was well understood without my having put it.

If you were to know the fact that this child died of an overdose of digoxin you would not be surprised by the symptoms shown by the child at the time of death. Is that correct?

THE WITNESS: That is correct.

If you had known if it were a known fact that the child died of the disease that you have depicted you would not be surprised at the symptoms shown by the child at death?

 $\label{the witness:} That is exactly precise as well, Mr. Commissioner.$ 

THE COMMISSIONER: Mr. Scott would like you to add 12 other diseases.

THE WITNESS: At least 12 others.

THE COMMISSIONER: And that would

not surprise you either?

THE WITNESS: Correct.

THE COMMISSIONER: You want to





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continue with this?

MS. CRONK: I am content to leave it there till after the break, Mr. Commissioner.

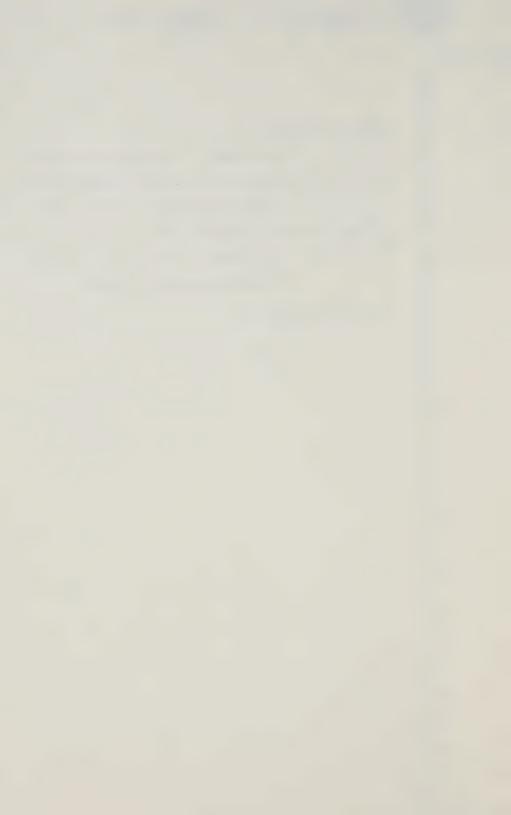
THE COMMISSIONER: 2:30? Will that

get you finished by 10 to 4:00?

MS. CRONK: Yes.

THE COMMISSIONER: 2:30.

---Luncheon recess.





AA EMP/PS ---On resuming at 2:30.

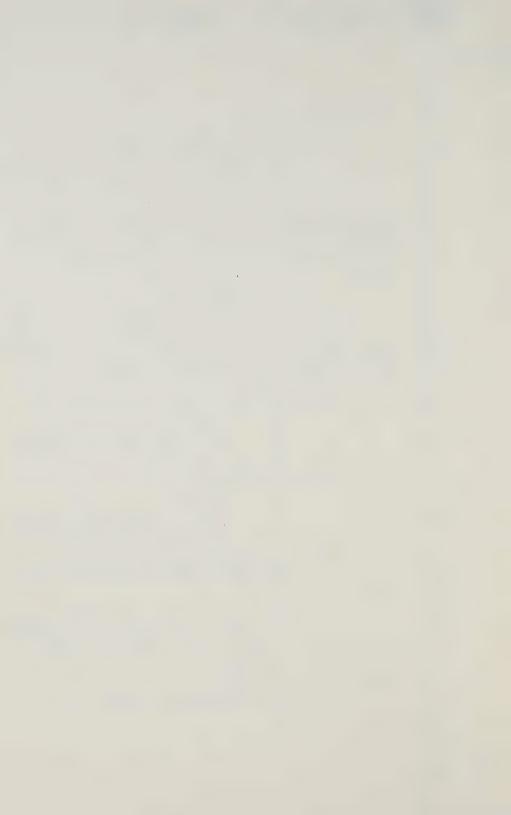
THE COMMISSIONER: Yes, Miss Cronk?

MS. CRONK: Thank you, Mr. Commissioner.

- Q. Dr. Freedom, do you recall immediately prior to the luncheon break a discussion concerning the terminal events sustained by Charlon Gardner?
  - A. Yes.
- Q. Dr. Freedom, as I believe you told me yesterday in evidence, you co-authored together with Dr. Richard Rowe and others a book entitled,
  "The Neonate With Congenital Heart Disease."
  - A. Correct.
- O. The second edition of which, I understand, was published in 1981.
  - A. Correct.
- Q. Doctor, I would like to show you an excerpt from the book, Pages 157 to 162.

MS. CRONK: "The Neonate With Congenital Heart Disease," second edition, 1981, published by Doctors Rowe and Freedom.

THE COMMISSIONER: Exhibit 169.



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EXHIBIT	169:	Extract from	the book	, "The Neonate
		With Congeni	tal Heart	Disease."

MS. CRONK: Mr. Lamek points out written by, not published by.

Q. Dr. Freedom, pages 157 to 162 that I have just provided to you are an extract from Chapter 10 of the book. The chapter is entitled, "Heart Failure in the Newborn."

Do you recognize the extract as being part of the book which you co-authored, Chapter 10?

A. Yes.

O. I ask you to turn, Doctor, if you would to Page 158 of the extract.

A. Yes.

Q. And see that there is a discussion under the sub-heading of Digitalization, and discussion concerning Digoxin under sub-heading of that name which begins on the bottom of page 158.

A. Right.

Q. And if we continue over,
Doctor, to page 159, the subject of digoxin toxicity
is under discussion and I direct your attention towards
the bottom of the first full paragraph with the
language beginning, "It is rather widely believed."



A. Let me see. Yes, all right		Let m	ne see.	Yes,	all	right
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- Q. Do you have that, Doctor?
- A. Yes.
- Q. "It is rather widely believed that gastrointestinal manifestations are unusual in young infants, but vomiting is quite common and is found in about one half of those who become toxic, even in the newborn period."

Stopping there for a moment, Doctor, as I understand it the discussion in this paragraph and continuing over to Page 160 in part addresses itself to the issue of symptoms of digoxin toxicity. Am I correct?

A. Yes.

Q. And the first one to which attention is drawn is the passage which I have just referred you and that is that vomiting is a symptom of digoxin toxicity in infants, and remembering this book and indeed, therefore, this passage refers to neonates, is a rather common symptom of digoxin toxicity. Is that correct, Doctor?

A. Correct.

O. Continuing with the passage,

"The anorexia of adults, which can be
related to elevated serum digoxin levels,
may be portrayed in these infants by



symptom:

disinterest in feeding."

Is that a symptom of a different kind, Doctor, or really just an extension of the first?

 $\label{eq:A.} \textbf{I} \ \ \text{think it is an extension of}$  the first, Miss Cronk.

Q. Continuing to the third

"Neuorologic signs have not been appreciated as a manifestation of digitalis toxicity in babies, and when present are difficult to ascribe to the toxic effect of the drug because so many other causes for neurologic instability exist at this age.

Dysrhythmias are common and are present in as many as 70 percent of infants with digitalis toxicity."

I take it, Doctor, that dysrhythmias of the kind described there in the article are a second symptom recognized to be symptomatic of digoxin toxicity?

A. Well, I would say as opposed to being a symptom because many babies don't know I would presume they are having dysrhythmia. It is a finding that one may associate with digoxin toxicity.



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Q. Well, it is something that
a physician on observation of a patient would consider
a symptom; isn't that correct, Doctor?

A. No, I would consider it to be a

no, i would constant to be see

Q. All right.

A. Because a patient won't say I am having a dysrhythmia. You would find that on evaluation of the patient.

Q. Having found it, would that alert a physician to the possibility of digoxin intoxication?

A. Or other causes.

THE COMMISSIONER: Are symptoms only

THE WITNESS: I think so. At least my understanding is they are something that is related to you either by direct verbalization or inspection of the patient.

Q. So that we understand each other, Doctor, for the balance of this discussion when I refer to symptoms I am referring to findings which would be observable either by electronic means or visually by a physician upon examination of a patient.



A. Right. I would agree with

that.

O. Continuing, then, Doctor:

"There is no pathognomonic rhythm
disorder in digitalis toxicity, and
almost any type of disturbance may be
found. Rhythms that combine increased
automaticity of ectopic pacemakers with
impaired conduction are in most series
strongly suggestive of a digitalis background. P-R interval prolongation
is not a sign of toxicity, only of
digitalis effect, but supraventricular
tachycardias, atrioventricular blocks
and premature contractions which occur
in roughly equal numbers certainly are."

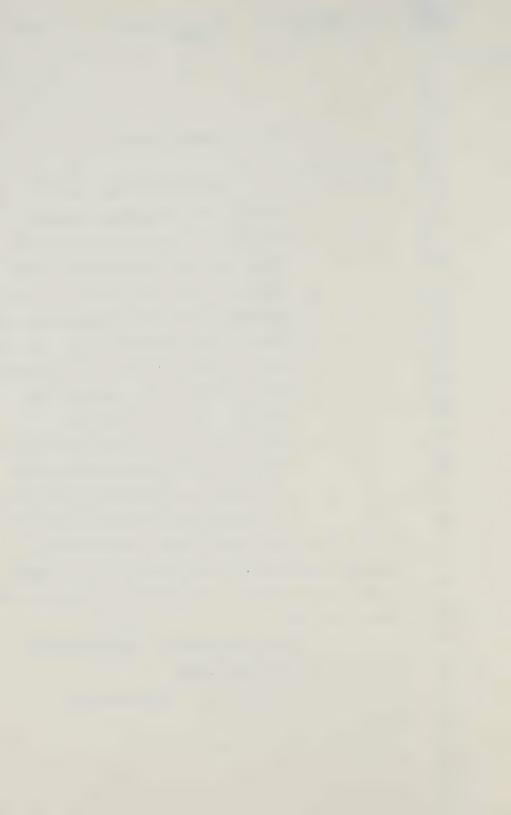
I gather that those items, Doctor, when found by a physician on examination of a patient would be taken to be, in my language, symptomatic or indicative of digoxin toxicity.

THE COMMISSIONER: "Consistent with" I think the doctor would prefer.

MS. CRONK: Q. Consistent with,

Doctor?

A. Yes.



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Continuing, Doctor: 0.

"Ventricular tachycardias are less common in the young, and bradycardia and marked atrioventricular block commonly arise with massive overdosage." Again, bradycardia and marked atrio-

ventricular block are stated to be commonly a result of massive overdose and I take it you would agree that those manifestations would be consistent with digitalis toxicity?

They could be consistent with other biochemical abnormalities as well.

All right. And with that caveat, Doctor, can we agree that when a patient manifests or demonstrates a number of these symptoms (again, my language) or a number of these findings are made by the examining physician in combination that would prompt the examining physican to consider the possibility of digoxin toxicity in that patient?

Yes, I would think so, with again the caveat that children can die and certainly there is evidence in the literature that children not on digoxin will die in the same way, either bradicardia or a ventricular dysrhythmia.



Q. I think I understand your evidence,
Doctor, that these findings are not necessarily conclusive of digoxin toxicity, but my question to you is
in the presence of such findings in one or more or
a combination it is one of the possibilities that the
examining physician would be prudent to consider.

MR. SCOTT: Well, Mr. Commissioner, I
don't want to interrupt, but can't we leave it where
it is, that all the medical evidence so far has been
that these symptoms, findings, are consistent with but not
necessarily indicative of. That is the evidence that
Mr. Lamek obtained.

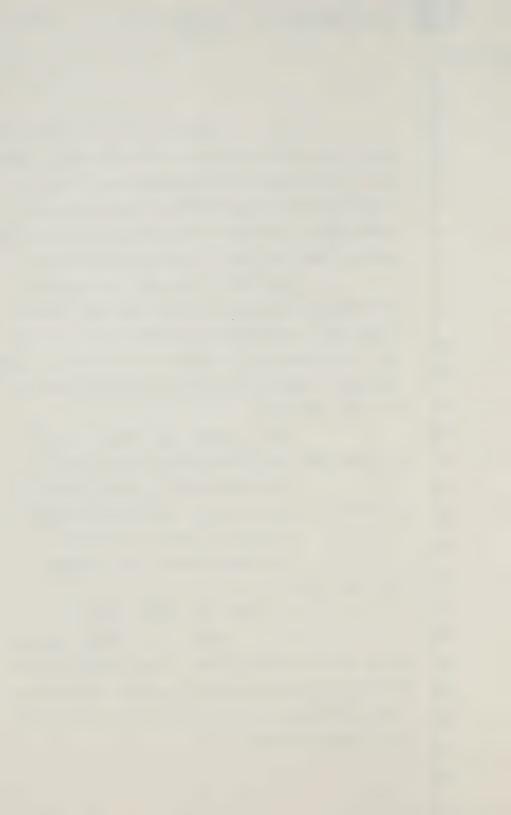
Are we going to go around or can we all agree that that is what it is and get on?

THE COMMISSIONER: I think we can get on, whether we agree or not. In any event because --
MS. CRONK: The point is made.

 $\label{eq:the_commissioner:} \mbox{ --- I think we}$  dealt with that.

MS. CRONK: All right, thank you.

Q. Doctor, if you could turn then to the case of Allana Miller. I understand that you were involved with the child's treatment and medical care as early as October of 1980 at the time of her first hospitalization?



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A. Yes, that is correct.

Q. I understand that, Doctor, although she had been previously hospitalized, the date of her last admission was March 19th, 1981 and she subsequently died in the hospital on March 21st.

A. Correct.

Q. And on the occasion of her prior admission in October of 1980, as I understand it, you had performed a cardiac catheter procedure on this child?

A. Correct.

Q. And if we go to Page 6 of the record, do we find there, Doctor, your reporting letter concerning the outcome of the catheter procedure which you conducted?

A. Yes.

Q. Your conclusions as stated in the reporting letter, as I understand them, Dr. Freedom, and I am referring to the Paragraph 3:

"In summary, then, the basic abnormality of Alana's heart is a common atrium and an admixture lesion of her pulmonary and systemic venous blood. This is usually associated with a cleft mitral valve and can be considered a form



of endocardial cushion defect. At the present time this youngster is not in heart failure and is being discharged on digoxin and diuretics."

You continue,

"There is no doubt that this youngster will require surgery for this malformation, but hopefully we could postpone it for another year or two."

And then you advance a caution, should she experience recurrent chest infections, particular form of medications and treatment regime should be pursued.

Is that correct, Doctor?

- A. Correct.
- Q. Following that reporting letter on the occasion of that catheter study, Doctor, as I understand it you examined the child again on December 17th, 1980?
  - A. Yes.
- Q. And if we could turn over the page to Page 8 of the record we will find there your reporting letter, again to the referring physician, dealing with your observations and your diagnosis based on that followup consultation on the 17th of December.



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Α. Correct.

0. If we turn to the second page of that reporting letter, Doctor, again in the summary section, you indicate,

> "In summary, this infant is progressing satisfactorily, although she remains small, and she had the clinical findings of some degree of pulmonary artery hypertension. We certainly have ruled out any shunting at ventricular or great artery level, and I would think that all the findings are explained in large part by a large left to right shunt at atrial level."

You continue,

"I think we should continue Allana in the meantime on digoxin which I did increase today to 0.6 ccs twice a day by mouth and aldactazide 10 mgs twice a day by mouth. I have suggested to the family that I reassess Allana in about three months."

And again you confirm your previous prognosis:

"There is certainly no doubt at all that this infant will require surgery and the



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only question is the timing of i.."

I take it, Doctor, that as at mid-December, 1980, the child was in your view progressing satisfactorily, although you continued to recognize that surgical intervention was going to be necessary.

A. Yes. As I look back on this letter, I think I am winding my way with Dr. Shaw to the fact I think this child would not go the year or two that I had hoped.

I said that she is small. She does have pulmonary artery hypotension, and although she was clinically getting along, I was a little more concerned about her in that letter.

Q. Now, Doctor, if we turn over the page to Page 10 of the record we find a subsequent reporting letter dated March 4, 1981, again from yourself to the referring physician, Dr. Shaw, and I take it that that reporting letter was a result of a further consultation and examination which took place on March 3rd?

A. That is correct.

Q. And on the first page and the second full paragraph, Doctor, if I could draw your attention to your observations as recorded there, you indicate,



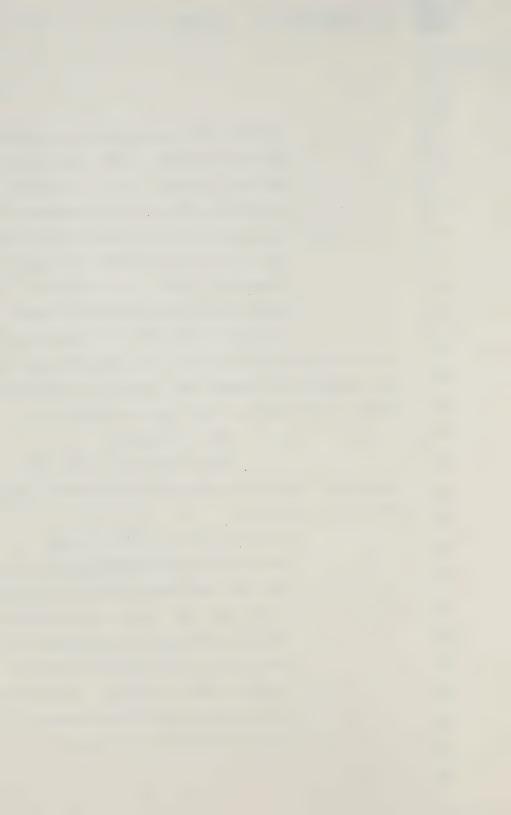
"Since I last assessed her in December, the child had been in the hospital on several occasions back in Kitchener with chest infections and bronchiolitis, and in addition the baby has failed to gain any weight. Continues to perspire excessively, has a nearly constant expiratory grunt, and remains breathless despite digoxin and aldactazide."

I take it the digoxin treatment had continued from the time of your last followup with the child in December through to the timing of your visit on March 3rd.

A. That is correct.

Q. If we turn over to the next page of your reporting letter, again the summary section, Doctor, you indicate,

"...this youngster really is not progressing satisfactorily at all. Indeed, she has gained virtually no weight in the past three months, has had multiple hospital admissions, I understand, persists with a very large heart despite intensive medical therapy. I am really a bit surprised that in the absence of significant ventricular septal



defect, she remains in such significant degrees of heart failure."

And then you continue,

"...because of this child's failure to respond to medical therapy that we should put her forward for early surgical intervention."

Stopping there for a moment, Doctor, I take it the view that you felt you were approaching in December has now been confirmed, that surgery would be required at a far advanced date than you had originally anticipated.

A. That is true.

Q. And continuing to the conclusion of your letter,

"For the meantime, we should continue her on digoxin .6 ccs twice a day by mouth and aldactazide 12.5 mgs twice a day by mouth. I would anticipate
Allana would be admitted within the next four to six weeks for the surgery and the only other question that remains to be discussed at the surgical conference is whether or not another catheter need be performed just prior to the surgery."

That would be a repeat catheter study following upon



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the one that you did in October, 1980?

A. Correct.

Q. And again, Doctor, if we turn to the immediately next page, Page 12 of the record, we see another reporting letter, I take it by you to Dr. Shaw, the referring physician once again, and you indicate in that letter that Allana's case had been discussed at the medical surgical staff conference held on the 9th of March, 1981, and there was unanimity of opinion that early surgery should be proceeded with and that the youngster should be scheduled for surgery later that month.

A. Correct.

Q. And you further indicate that the conclusion of the conference when her case was discussed that a further catheter procedure would not be necessary?

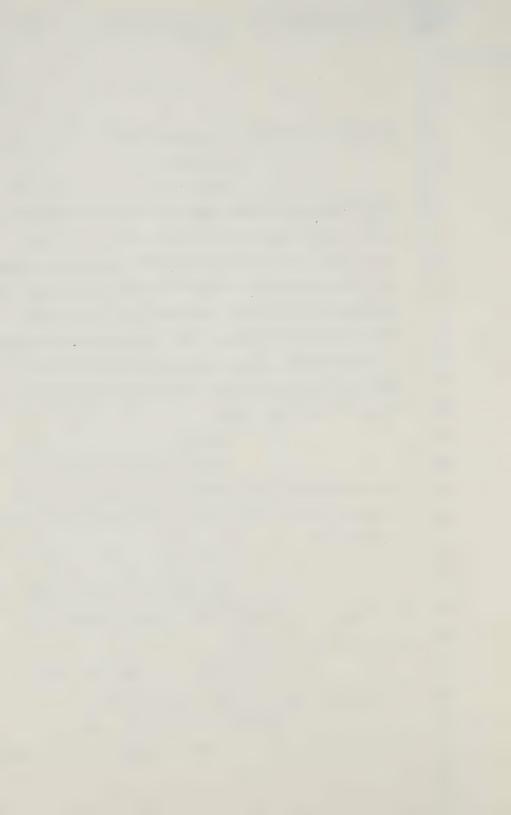
A. Correct.

Q. Now, Doctor, I take it from my review of the record that following the date of your reporting letter --

MR. PERCIVAL: I'm sorry, Ms. Cronk, what was the date, the date of the report?

MS. CRONK: March 12th, 1981.

O. I take it, Doctor, that following



your report to Dr. Shaw on March 12th the child indeed was admitted on March 19th?

- A. That's correct.
- Rowledge of this child's condition was there any event on the 19th of March or in the day or two preceding that which precipitated the entry to the hospital at that stage, bearing in mind that your earlier suggestion to Dr.Shaw was that it would be four to six weeks hence?
- A. Yes. I believe it was on the Thursday prior to this youngster's death that Dr. Shaw called me late one afternoon and indicated to me that Allana was having multiple dysrhythmias and worsening of her congestive heart failure, and he said he felt more comfortable because of the rhythm disturbance if the baby was in Toronto.
- Q. And in consequence of that I gather she was admitted on the 19th of March?
- A. Yes. I was not on call that evening, but I touched bases with the admitting fellow -- excuse me, the fellow on the floor that evening, and the resident staff. I made arrangements for her to be admitted.
- Q. Right. Doctor, on that date, the date of her admission, did you in fact examine the child?



Α. No.

Do you recall having any dis-Q. cussion with her parents at the time of her admission on the 19th?





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I don't	believe	so.	I	think	she	came	in	in	the	
evening	after I	had	gor	ne home	₽.					

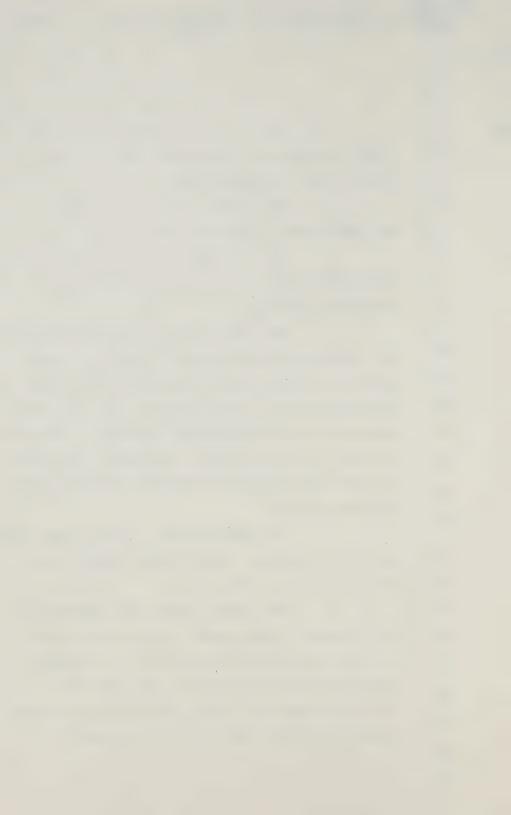
MS. CRONK: Excuse me, Doctor, Mr. Commissioner, with your indulgence.

Doctor, I apologize I can't immediately put my hand on the extract from the preliminary hearing.

MR. SCOTT: I am sorry to interrupt, but the last question presents a problem, I should collect all these and deal with them at one time. Is Commission Counsel going to suggest that there was a conversation with the parents? Because, if they are, it seems to me in fairness to the doctor they should say when that conversation occurred, with who it was and what was said.

THE COMMISSIONER: Yes, I agree with that, but I thought, I didn't really think you had that plot in mind, did you?

MS. CRONK: Well, Mr. Commissioner, as it happens I had intended to do precisely what Mr. Scott suggested on the basis of Dr. Freedom's evidence at the preliminary hearing, and the regrettable fumbling was for the preliminary hearing transcript which I can't find at the moment.





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If I can assist Mr. Scott in ---THE COMMISSIONER: Well, I think though that probably Mr. Scott's point is before you even put the preliminary hearing to him you should put the circumstances of it, and say, did he remember that occasion.

MR. SCOTT: While we were at it just so I will be on the record. During the examination of Dr. Rowe and - I shouldn't say Dr. Rowe, of Dr. Freedom and Dr. Fowler, preceding this attendance at the Commission, the Commission Counsel have from time to time ---

THE COMMISSIONER: You are talking about the private meetings?

MR. SCOTT: Yes. It is not that private, there have been others there, but they have from time to time suggested, they have asked them, and I won't say in a menacing fashion, but in a knowing fashion whether they were alerted by nurses, or others in the Hospital about the risk of digoxin deaths in the summer of 1980 and in the autumn and so on. doctors have answered their questions honestly.

The same exchange occurred here yesterday at page, I don't think you have to look it up, but it is page 5289 and following, where



Miss Cronk more than once asked, as at the bottom of the page:

"Q. Do you recall, Dr. Freedom, any member of the nursing staff raising with you, or drawing your attention to, the increased number of deaths that appeared to have been occurring in July and August on these wards?"

And then he gives his answer which is about the head nurse meeting with Dr. Rowe. Then at line 14:

"Q. Prior to that meeting, Doctor, had any member of the nursing staff approached you personally to discuss or raise with you the issue of these increasing deaths?"

And he gives his answer:

"I don't recollect..."

Now, I have no objection to those questions if they are simply open-ended requests for the doctor's recollection and information, but I am sure my friends are conscious of the rules applied in courts which I think might in fairness be applied here.

THE COMMISSIONER: It might or might not be applied here. If it isn't applied here I will



give a great deal less weight to the apparent contradiction.

MR. SCOTT: Well, further than that, it seems to me that if my friend either in these pre-meetings, or at this Inquiry, has information of such conversations it should be put to the witness.

THE COMMISSIONER: Yes, obviously I can't control pre-meetings.

MR. SCOTT: No.

THE COMMISSIONER: But I think,
Miss Cronk, whatever you want, Mr. Lamek seems to want
to take over on this.

MR. LAMEK: Yes, if I may.

MR. SCOTT: That is just my luck.

MR. LAMEK: Mr. Commissioner, let

me assure Mr. Scott, through you, that neither

Miss Cronk or I need to be reminded of the rule that

applies with respect to fairness.

Mr. Scott will recall that on the occasions that I have interviewed Dr. Rowe, and I have had information which he did not have, as for example extracts from communications books, I have provided them to him and I have given him an opportunity to consider and read them. I have no intention, and I assure you neither does Miss Cronk



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of being unfair in the slightest way to any of these witnesses.

Mr. Scott may take it that if there is no contrary version to the witness' evidence put to him, either when he is in the box, or in the course of a preliminary meeting for preparation of his evidence, that no such information is available to the Commission Counsel. Let me set his mind at rest through you, sir.

MR. SCOTT: I am entirely grateful with that. I am getting paranoid the longer I sit here.

> MR. LAMEK: Yes.

MR. SCOTT: And that is what it is. There is no evidence that anybody has been unfair, but I did want to remind the Commission if I could ---MR. PERCIVAL: My friend has a short memory, Mr. Commissioner.

MR. SCOTT: Well, I wasn't talking about Mr. Percival, but more later on that score.

Speaking of Mr. Lamek and Miss Cronk I didn't intend to suggest any unfairness but I am glad to have it affirmed that they understand the principles as I thought they did.

> Yes, all right. THE COMMISSIONER:



Now, Miss Cronk.

MS. CRONK: Q. Dr. Freedom, ---

THE COMMISSIONER: We won't hold these interruptions against you if you promise to finish by 10 minutes to 4:00.

MS. CRONK: I am grateful for that, Mr. Commissioner, but nonetheless I will keep my eye on the clock.

Q. Dr. Freedom, I am in some difficulty because I do not have with me, I thought I did, the volume of your evidence from the preliminary hearing. Do you have it with you, sir?

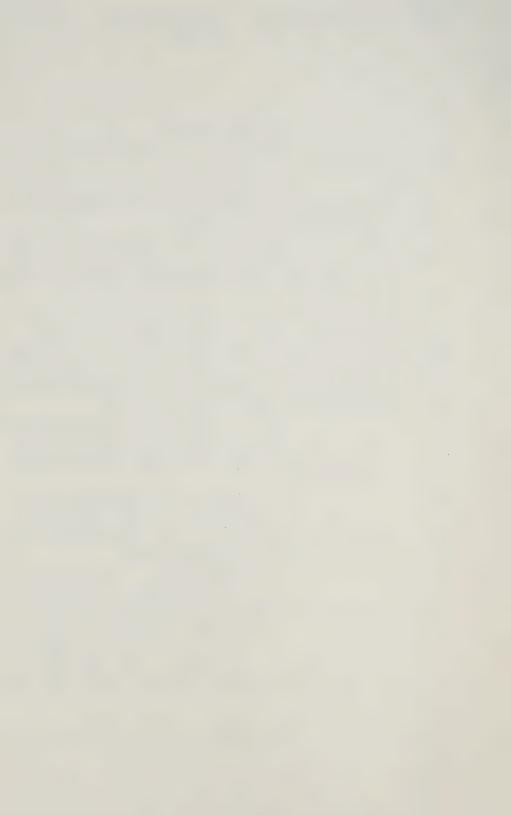
A. I have been searching for that,
Miss Cronk, during this interesting exchange and I
can't find it.

I believe my own recollection is I had spoken to the family on the Friday evening, the evening before the youngster's death.

THE COMMISSIONER: The 21st was a Saturday, the Friday evening would be the 20th.

THE WITNESS: Correct. My own recollection, Mr. Commissioner, was I had spoken to the family that evening, the 20th, and not the evening of admission.

MS. CRONK: Q. Dr. Freedom, you may



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well have resolved my confusion and I may simply have confused the two dates. The evidence to which I refer you is found at Volume, I believe it is 21, at page 24 and the question is put to you with respect to Allana Miller:

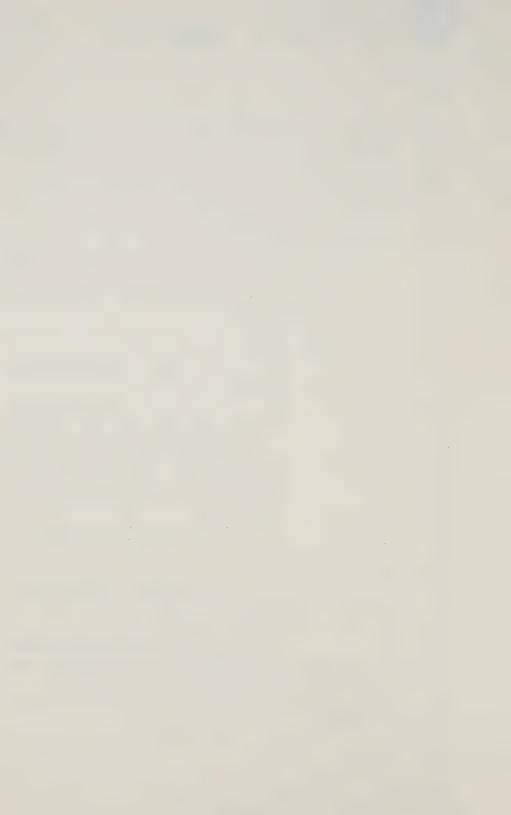
- "Q. You saw her Friday all right, Friday, March the 20th you saw the baby.
  - A. Yes.
  - Q. All right. When did you see her then?
  - A. I saw her on Friday morning, the morning after admission and I saw the family Mr. and Mrs. Miller and the baby on Friday evening about 6:30 or 7 o'clock."
  - A. That was my recollection,

Miss Cronk.

Q. Dr. Freedom, I apologize, I thought it referred to the 19th.

I take it then that on two occasions, on the Friday you saw the child in the morning, and you saw the child and spoke to her parents later in the evening.

A. Yes, that is true.



Q. Can you tell me what your prognosis was on the basis of the child's condition on the evening of the 20th when you observed her?

A. Well, firstly, the baby had not done well over the months December to March and I was certainly concerned about this baby. I was also very concerned about the rhythm disturbances that she was having. Taken in isolation these rhythm disturbances are not invariably benign. I had been particularly interested over the years in children who have this peculiar venous anatomy that she had with so-called azygous continuation of the inferior cava. There has been quite a bit of literature that these children were prone to develop heart block, and this is in the absence of digoxin, because their electrical system so to speak is not formed like a normal baby.

So first of all I had a concern when Dr. Shaw called me about what was going on. When I saw the baby twice on Friday I thought that by Friday evening the baby looked more comfortable. Certainly when I saw the youngster earlier on Friday morning, excuse me, earlier Friday morning, the child was tugging and showed quite a bit of respiratory distress. It was still having very chaotic rhythm on cardiogram.



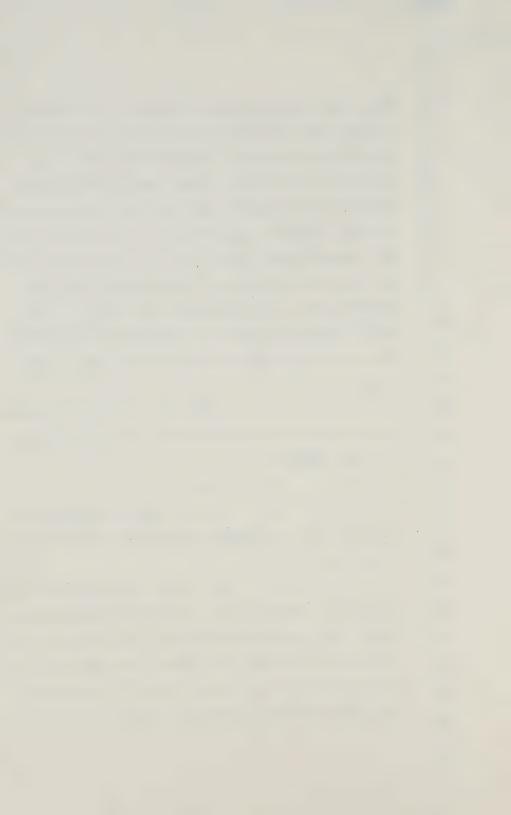
When I saw the baby Friday evening with the family
I think, if I remember correctly, Mr. and Mrs. Miller
were there at bedside, I indicated to them I was
pleased and she seemed to have shown some progress
over the day but that I was still so concerned about
her that I was not going to have her discharged before
the surgical date, which I believed was 10 days or
two weeks down the road. I didn't think the baby
would do well at home and that I was going to keep
her in the Hospital and try and advance the surgical
date, get a cancellation from someone the following
week.

 $\Omega$ . Doctor, on the day of admission, the day before, on the 19th when Allana Miller came into the Hospital.

A. Yes.

Q. Was the digoxin therapy that you previously recommended continued at that stage on the 19th?

A. No. When I got the phone call, Miss Cronk, from Dr. Shaw about the rhythm disturbance, when I called the resident or my fellow on call and mentioned to them that Allana was being admitted, I suggested that the digoxin be held. Or at least the level be drawn and probably should be held to find



out what that level was.

Q. Turning to page 87 of the record, the biochemistry report from the lab that appears there, we see that a sample was taken, I'm sorry, Doctor, do you have that?

A. Yes, I do, thank you.

Q. We see that a sample was taken on the 19th of March, no time is indicated and that it resulted in a level of .6.

A. That is correct.

Q. Is that the level which to your knowledge was the result of the ordering for a sample you had made on the 19th?

A. I seem to recollect, Miss Cronk,
I have given previous testimony using the number .9.
Now, that could just be my memory, but certainly it
was a low level.

Q. Now, fairly, Doctor, I have been through the medical record and if there was a .9 nanogram level on the 19th of March I am not aware of it.

A. No, I am sure that was just my misinterpretation, but I knew it was a low level.

Q. So a level was ordered, and



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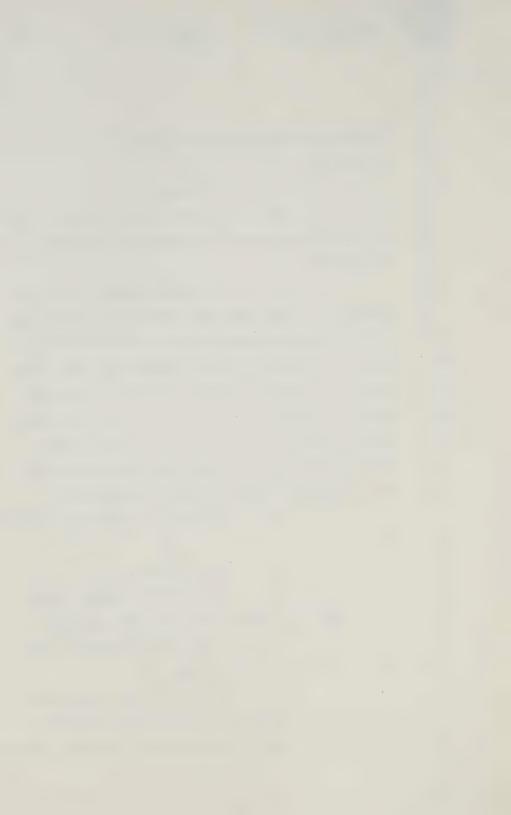
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I believe you said digoxin was held to that purpose on the 19th?

- Correct.
- At the time you saw the child  $\Omega$ . on the 20th had digoxin therapy been reinstituted at that point?
- I remember going through the corridor up on the 4th floor during Friday, and one of the residents happen to ask me what shall we do about the digoxin. I can't remember the time frame whether we had the digoxin level back. I remember saying, why don't we hold it, the baby seems to be settling down. So my last recollection, before I found that she had died was that I had said, let's hold the digoxin one more day, one more dose.
- That was I believe you said on 0. the --
  - On the 20th,
- On the 20th, right. Do you 0. recall when that discussion took place, Doctor?
- Some time on Friday, I just can't remember the exact time.
- Q. And if we turn, Doctor, to page 43 of the record, the portion of the doctor's orders, we see that at approximately 3:00 p.m. on the



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20th, the Friday, digoxin was ordered and a maintenance dosage of .32 milligrams.

A. Correct.

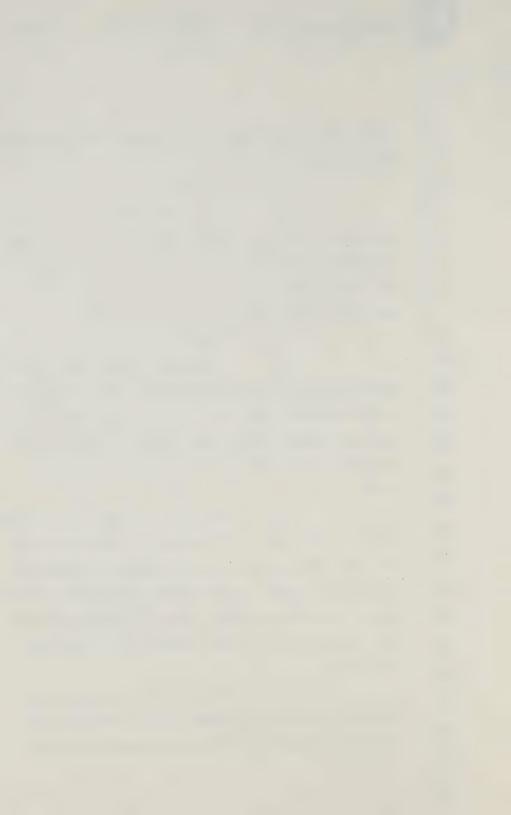
Q. And if we turn to page 38 of the record, Doctor, extract from the medication and treatment, treatment records, we see that digoxin was administered at 9:00 p.m. on the 20th of March, and the notation appears to be Susan Nelles.

A. Right.

Q. After your visits and discussion, visit with the child and discussion with the parents in the evening of the 20th as you have described it, were you on duty later that evening, or did you have occasion to see Allana Miller again prior to her death?

A. No, no, I did not. As a matter of fact, Miss Cronk, the sequence of the medications that you just pointed out were actually pointed out to me by Mr. Austen Cooper at the preliminary session, had where I had given evidence that I/suggested it to be held, and yet it was clear enough that it had not been held.

Q. Doctor, at the time of your discussion with the resident: on the 20th, did you order the digoxin be held and not administered, or



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was that I believe as you have said, at least the language you used was a recommendation that it might not be necessary?

A. Again, Miss Cronk, I wasn't the ward chief in March, it was Dr. Fowler, and I believe - I can't reconstruct the entire conversation, but it was my understanding that this patient, the resident asked me what to do. I thought the baby had settled down and I would have suggested holding it, I think it is more appropriate, however, as Dr. Fowler was the ward chief and I keep reminding our residents even though the patient was referred to me when the ward chief is chief, he will dictate the therapy.

Q. Is it your understanding that was the basis upon which digoxin was ordered at 3:00 p.m. on the Saturday?

A. Yes.

Q. And continuing on the same page, Doctor, page 43 from the Doctor's orders, we see on the 21st of March at approximately 2:30 a.m. an order is entered for the holding of digoxin?

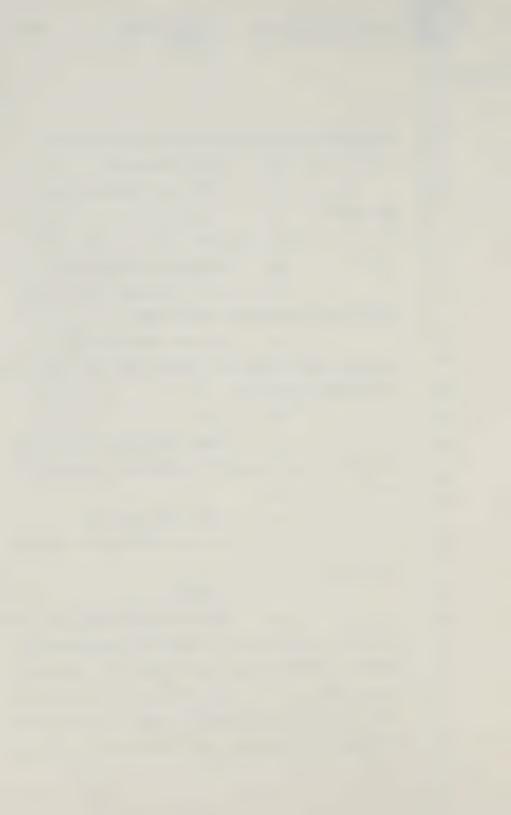
A. Yes, I see that.

Q. Doctor, I take it from what you have said that you were not present during the arrest



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2	or the resusc	itation e	fforts for Allana Miller.	
3		Α.	That is correct.	
4		Q.	Were you contacted after	
5	her death?			
6		Α.	Yes.	
7		Ω.	And told of her death?	
8		Α.	Yes. Actually I was called	
	early that Saturday morning at home.			
9		Q.	Are you familiar with the	
10	terminal events that were events that were sustained			
11	by the child,	Doctor?		
12		Α.	Yes.	
13		Q.	Were you present at the gross	
14	autopsy? I u	nderstand	the autopsy was conducted on	
15	the 21st of M	arch.		
16		Α.	Yes, I did see that.	
		Ω.	And you examined her heart at	
17	that time?			
18		Α.	Correct.	
19		Q.	The record contains, Dr. Freedor	
20			l reading on a biochemistry	
21			u turn to page 70, it is the	
22			st of March, 1981, no time is	
	indicated in	the bloch	emistry report, and the level	

recorded is 78 nanograms per millilitre.



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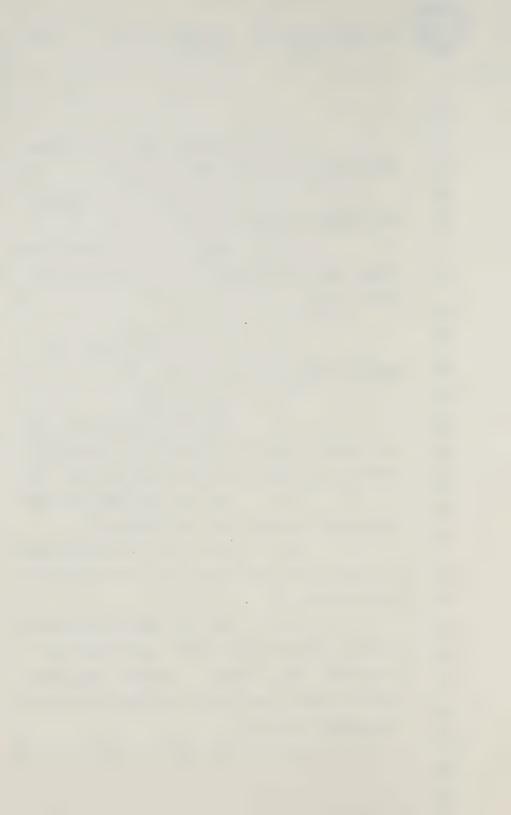
Can you help me, Doctor, as to when you became aware of that digoxin level?

- A. I believe it was Saturday, late Saturday evening, the 21st.
- Q. And is it your understanding,
  Doctor, that is the postmortem digoxin reading on
  Allana Miller?
  - A. Yes.
- Q. Do you know, Doctor, who ordered that level to be taken?
  - A. No, I do not.
- Q. I take it then, Doctor, that you learned of that level later on the evening of the day of her death, is that what you said?
- A. Yes, she died early Saturday morning and I learned late that evening.
- Q. And I take it then you were not aware of the level at the time you attended the gross autopsy?
- A. No, that was in the morning.

  I did two catheters on Saturday, one of whom was

  Justin Cook. If I remember correctly I saw Allana

  Miller's autopsy right before or right after one of
  the catheter studies.
  - Q. And prior to learning of that



postmortem digoxin level, Doctor, at the time that you participated or observed the gross autopsy and examined the child's heart, based on those observations and your knowledge of her clinical condition, did you at that stage formulate an opinion as to her likely cause of death?

A. Yes, I felt although she had looked improved when I saw her some seven or eight hours before her death she still had very severe heart disease, an underlying dysrhythmia and a very poor weight gain. I felt that seeing the huge hole in her heart and the congested lungs that this would explain her death, it did explain her death.

Q. Were there any factors recorded in the medical record of the child, or any terminal events that were drawn to your attention upon which you in part or in whole based that opinion, Doctor?

A. No. Again I think it was sort of the entire perception of little Allana Miller, seeing she had gotten sicker over the months and not gained weight and had a very big heart, and the autopsy table seeing a very much enlarged heart.

The virtual common atrium, the lack of partition and the congested lungs.

Q. Doctor, was there any discussion





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on the 19th when Allana Miller was admitted to the Hospital as to the merits, or lack thereof of moving her surgery date up so that surgery occurred shortly after her admission, or within the next several days rather than 10 or 12 days hence?

No, I don't believe so. Again she came in on Thursday evening, I saw her on Friday and I think the feeling of Dr. Fowler and the ward staff is that hopefully she would hand in there for the next week to be treated with vigorous diuretics and would actually be in better shape for surgery.

Doctor, after you were made aware of the postmortem digoxin level which was obtained on Allana Miller, did that influence the opinion that you had earlier on that day formulated as to the likely cause of her death?

Yes, it did. I was very concerned because here we had a very low level, you know, again I remember a .9 and now we had a level, and I can't remember, Miss Cronk, if I was told the level of 72 or 78, just that it was sky high. I said to myself, "My God, how can she go from very low to very high, I wonder if there is murder".

Was that the first time, Doctor, that the possibility of a deliberate overdose



or intentional overdose of digoxin being administered to patients on the cardiology wards occur to you?

A. Yes.

Q. And did you form that view on the basis of the digoxin level and the height of the digoxin level as it was described to you that evening on the 21st?

A. Not just level per se, but the fact that again I had known the level was low that afternoon. I had gone home thinking that they were still going to hold the digoxin, and therefore how does one explain a very high level that way.



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Doctor, we know that Allana Miller had been treated with digoxin for some considerable time prior to admission to the Hospital.

Correct.

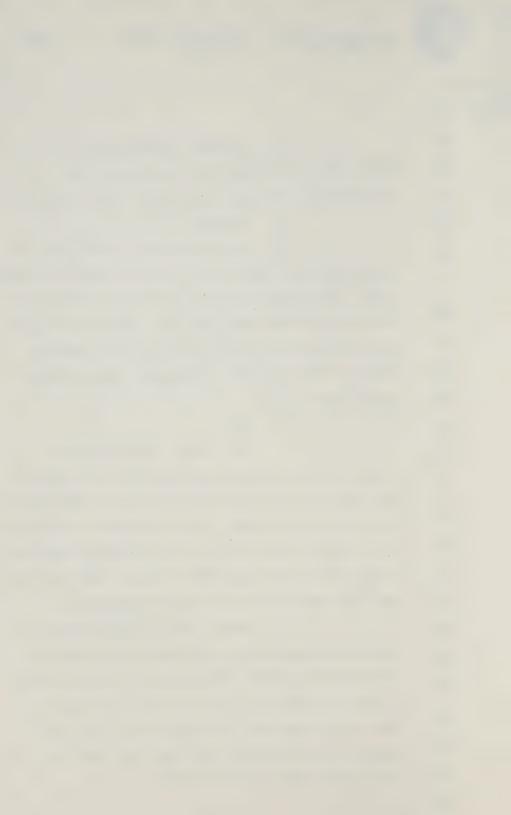
And on the 19th it was held, as we have seen, in order that a level could be obtained, on the 19th on the day of her admission insofar as you are aware were there then any manifestations in her condition in a clinical sense or any symptoms which you felt to then be consistent with possible digoxin toxicity?

No.

All right. And similarly,

Doctor, when you observed and examined the child in the evening of the 20th when you spoke to the parents, was there at that stage, before you left the Hospital, any physical manifestation in the clinical conditions of the child which suggested to you or which were in your view consistent with digoxin toxicity?

Well, when I looked at her in her room she was still on the monitor and she was still having a chaotic rhythm and if I had not seen or had not appreciated the fact that her digoxin level, which had been recorded earlier, was low, I would still have wondered if there had been the question of digoxin intoxication.





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So, I guess as best as I can reconstruct the events, when I left her on Saturday excuse me, Friday evening, I was not concerned that digoxin intoxication was a cause of her dysrythmia.

Doctor, you have indicated that when you did learn of the postmortem digoxin level it influenced your opinion earlier formed that day as to the likely cause of her death. You have indicated further that that was the first time that you considered or entertained the possibility of some intentional administration of an overdose of digoxin?

> A. Right.

Did your concern or your impression at that time extend only to Allana Miller or were you concerned at that time with respect to any of the deaths which had preceded hers?

Well, I think that evening again in the discussion with the fellow, you know, he was the one who told me there was a high level. mentioned then Pacsai and again in the same context Estrella and I wondered to myself that evening over the last nine months, preceding nine months, but it was Saturday evening.

All right. So that in your own mind, Doctor, at that point in examining or





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considering the death and the circumstances of death of Allana Miller, I take it that digoxin toxicity by way of an intentional overdose was something that you considered?

Yes. I think I felt it was either intentional or inadvertent but I would consider it because this was the first case where I remembered that we had had a low level and then a sky high level.

O. Dr. Freedom, Dr. Rowe in his evidence testified, recorded at Volume 18, page 3233 with respect to the death of Allana Miller and the discovery by him of the postmortem digoxin levels:

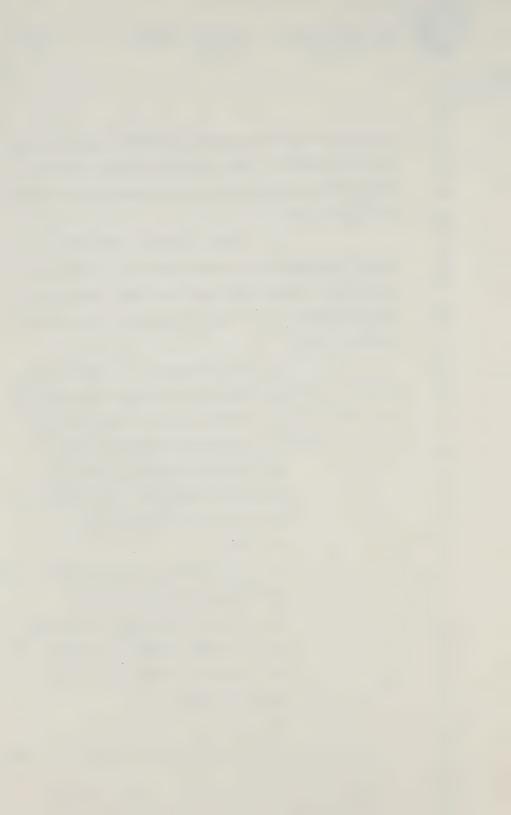
> "Q. Doctor, did you not ask the question of yourself, did you say how did the child get that digoxin? "A. Yes.

"Q. And how did you answer it for your own purposes in your own mind?

"A. I didn't know how the child got that, it didn't seem to me likely that that could be except by it was an obvious overdose.

"O. Yes.

"A. It seemed to me it was an obvious





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"overdose at the time and the overdose could be through a mistake or intentionally and I think we understood that those matters were being investigated very promptly."

Continuing on further down the page:

"Q. Did it appear to you likely that the overdose which you inferred had been administered, did it appear to you likely that that overdose had been administered accidentally?

"A. I thought it was unlikely.

"Q. And since that time at any time to the present have you had any reason to change that view, the question that it was unlikely that it was?

"A. I haven't changed --- "

And then an exchange between the

Commissioner and Mr. Lamek.

"A. Well, I have had some other thoughts about that. I think those are matters that have emerged a long time since over the question of what happens to digoxin in tissue after death and when a patient has been resuscitated.



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If in fact it means as you originally inferred an overdose, have you changed your view that such an overdose is unlikely to have been administered accidentally?

"A. I can't exclude that possibility but I thought that was unlikely.

"0. You thought that was unlikely?

"A. Yes."

Is that an opinion which you share?

A. Yes.

Dr. Freedom, we have heard evidence that the death of Allana Miller was reported to the coroner on the evening of September 21st, the Saturday.

> Α. March.

That's right, March 21st, sorry.

Can you tell me, sir, did you participate in the decision to report the death to the coroner?

No, I did not.

Do you have any knowledge of the circumstances under which it was reported to the coroner or as to any discussions which may have obtained as to the necessity for reporting the case to the coroner?





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It was my understanding that when the digoxin level came back that evening that's what led to the reporting to the coroner's office.

Q. All right. Doctor, there was a meeting we have heard held on the afternoon of March 21st at the coroner's office amongst representatives of the Hospital and representatives of the Coroner's Office and the Metropolitan Toronto Police Force. Did you attend that meeting?

No, I did not.

Are you aware, Doctor, or do you have any knowledge as to whether or not the death of Allana Miller was discussed at that meeting on the 21st of March at the coroner's office?

THE COMMISSIONER: Well, I think not. He says he wasn't there. He could only have heard from someone else. However, it is easier to have the answer than to go on with it but I wanted to just tell you I would pay, with great respect, absolutely no attention to what he says somebody may or may not have discussed. If the person who was there says what was discussed ...

MS. CRONK: Well, I am in your hands, Doctor.

THE WITNESS: I have no information.



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THE COMMISSIONER: That's very helpful of you, Doctor, thank you.

MS. CRONK: Q. Doctor, turning then to the death of Justin Cook. As I understand it he was admitted on March 20th.

A. Yes.

Q. Was seen by Dr. Fowler who was then, you have indicated, the ward chief for the month of March?

Yes, and I believe Dr. Fowler was also on call for that weekend and I was backing him up on the catheter laboratory.

Q. All right. And he died on March 22nd, as I understand it?

Correct.

Doctor, based on my review of the record, it is my understanding, and I believe you have indicated earlier this afternoon that you performed the catheter procedure on this child on the 21st of March, Saturday?

> Yes, that's correct. A.

Were you on duty for that purpose on the 21st of March, Doctor, or were you called in to conduct the catheter?

Again, Miss Cronk, we have a



system in the Hospital, at least in the Division of Cardiology, since Dr. Fowler and Dr. Vera Rose do not do catheter procedures that any evening or any weekend one of those two physicians is on call one of us will back them up for procedures. So, I was not specifically in the Hospital but they had called me that morning and told me there were at least two catheters to be done Saturday. So, I came in for that reason.

Q. Right. And if we turn, Doctor, to page 69 of the medical record, which is Exhibit 116, do we find there your report to the results of the catheter study that was conducted?

A. Correct.

Q. Once again, Doctor, reading under the section entitled Final Diagnosis, do I correctly take it that the predominant findings following the catheter procedure were dextrocardia with atrial situs solitus and tricuspid atresia?

A. Yes. I think in youngsters with complex heart problems it is often difficult to give a priority to several potentially lethal conditions. This baby, in Justin, I think Nos. 2, 3, 4 and 5 can probably be put on the same line.

Q. Doctor, following the conduct of





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the catheter study, did you have any further direct involvement in the care and management of Justin Cook prior to his death?

No.

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Did you subsequently attend the autopsy that was conducted on March 22nd following Justin Cook's death?

> Yes, I did. A.

Q. Did you have an opportunity to observe his heart at that time?

> A. Yes.

Q. Are you familiar as well, Doctor, with the terminal events sustained by this child?

> A: Yes.

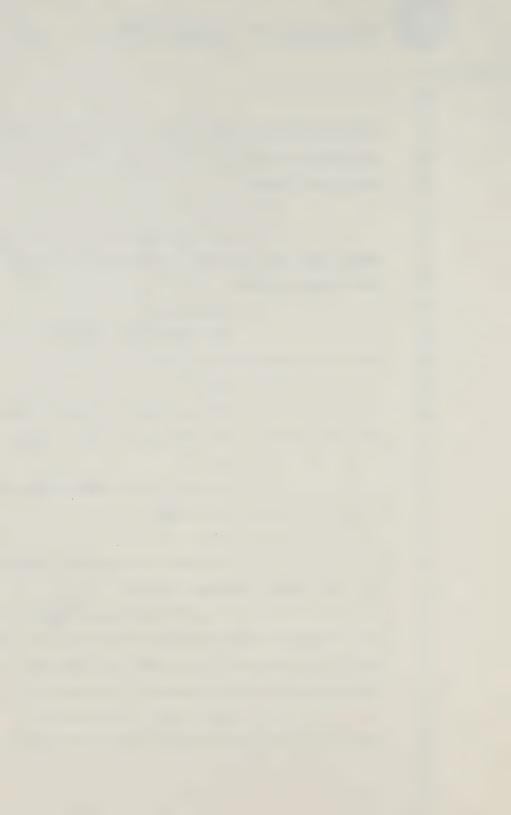
You have had an opportunity then I take it to review the records?

> A. Yes.

Did you do so in March, shortly 0. after his death, or do you recall?

I can't recall specifically. I have looked at a number of these charts with Dr. Rowe over the past two and a half years but certainly in getting ready for this Commission I reviewed it.

Q. All right. At the time of attending at the gross autopsy, Doctor, did you have



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any information as to any digoxin levels which had been obtained in respect of Justin Cook?

> A. No.

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Right. Based on your observations at the gross autopsy and based on your knowledge of the child's anatomical condition as a result of the catheter procedure and the information available to you concerning his terminal events, did you formulate an opinion as to his probable cause of death at that stage?

Yes, I did. One of my concerns also Miss Cronk at the autopsy table was that I felt in addition to the diagnosis that I had listed on my catheter form on page 69, I was concerned as well that the sub aortic area was somewhat narrowed, which is not regularly seen in this type of heart malformation. Certainly in reviewing the chart and seeing this youngster had a profound cyanotic episode before death, before I was informed of the digoxin levels - excuse me, the postmortem digoxin levels, I felt that this youngster had a very complex heart disease, certainly with severe narrowing to the lung artery and at least on the post mortem table I thought a compromised sub aortic area. I felt the baby died as a result of obstruction to both outlets, that is,





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to the aorta and to the lung artery in the setting of complex cyanotic heart disease.

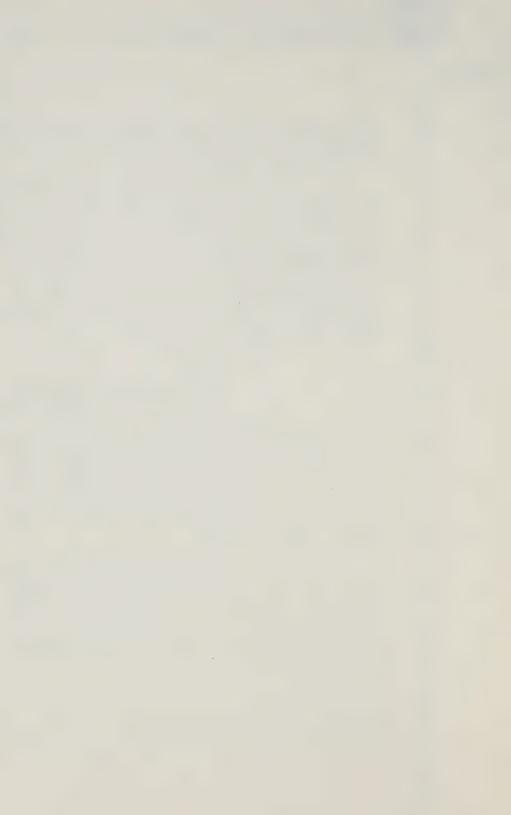
Q. We know, Doctor, that a digoxin level based on a sample drawn on March 22nd at 4:30 a.m. resulted in a digoxin level of 72 nanograms and another sample drawn as well on March 22nd except at 6 a.m. resulted in a level of 68 nanograms. I take it that at some point you became aware of those levels with respect to Justin Cook?

- Correct. A.
- Do you recall when that was?
- I can't remember whether it was

later on Sunday when I called in to see if they had more catheters to do or Monday, but I know it was the next - no, I'm sure it was before Monday morning because I had a meeting with the, I believe it was the police on Monday morning.

Having learned of those levels, Doctor, did they influence or assist you in reconsidering the opinion as to the likely cause of death of Justin Cook which you had formulated following the gross autopsy?

Yes, they did. I had specifically commented during the catheter study, at least to my fellow, that if this child started to have problems





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We would not want to use digoxin. I felt that would compromise the baby as opposed to ameliorating, you know, the terribly severe heart disease. We talked about the use of inderol, so, when I heard either later on Sunday or early Monday morning the digoxin levels were of this magnitude I thought that is probably what caused this youngster's death.

Doctor, you have indicated that at the time of performing and carrying out the catheter procedure you felt the digoxin would compromise the condition of Justin Cook?

> A. Right.

Based on what you were observing during that procedure?

> A. Right.

Do I take it that that is the same as indicating that in your view it was contraindicated, would have an adverse effect on the child?

I think - to try and answer that succinctly - yes. I think I can conceive of a situation where one might be pushed into a corner to use digoxin. Some of these children will develop severe dysrythmias, either during a procedure or after the procedure with heart rates 250, 260. I think in some of those children we will be put into the





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position of - we would not like to use it, it is the best type of drug to control the dysrythmia. So, with that type of exception I would have said the digoxin was contraindicated in this baby as the care.

Q. Doctor, to your knowledge, or do you have any knowledge as to the conduct of digoxin assays in respect of Justin Cook in the Hospital on tissue samples?

A. No.

Q. Okay. Doctor, could I refer you briefly to Exhibit 32B. Mr. Registrar? It is at Tab 45, Dr. Freedom.

A. Yes.

one of those exhibits.

THE COMMISSIONER: No, no, it's all right, you go ahead and I'll see if I can follow it.

MR. PERCIVAL: What is it?

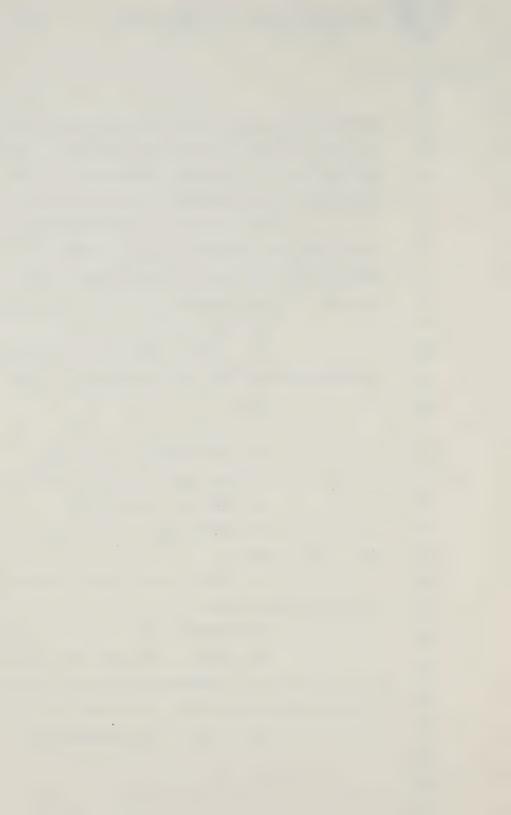
THE COMMISSIONER: It is 32B, it is

MS. CRONK: At Tab 45, it is one of Dr. Ellis' digoxin books.

THE WITNESS: Yes.

MS. CRONK: Q. The very last page under Tab 45, Doctor, is a handwritten page with a series of handwritten notes on it. Do you have that?

A. Well, I have something that





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starts with Staff Sergeant Press' name on it. Is that what you're referring to?

> Q. Yes, that's it.

A. Yes.

Dr. Freedom, as I have indicated, 0. the book that you are looking at, the document under this tab is one of Dr. Ellis' digoxin books from the biochemistry laboratory at the Hospital. Now, on the page to which I have drawn your attention there is a series of notations, the first at the top lefthand side of the page the words "Postmortem Samples" and beside that the name "Dr. Freedom".

> Α. Yes.

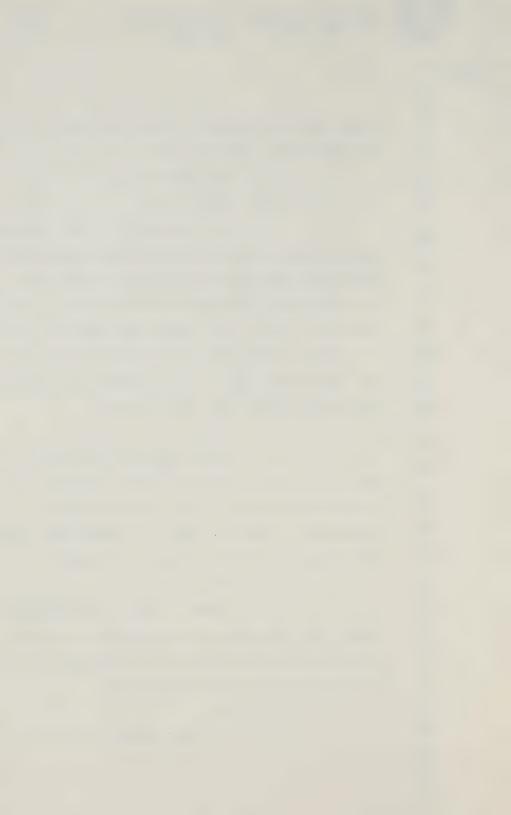
Immediately to the right of that what I take to be V close IVC and it is either to heat or to heart SVC. I have some difficulty in reading that. Under the name Dr. Freedom the words "stat. dig.". Do you see that, Dr. Freedom?

> A. Yes.

Right. And on the right-hand 0. side of the page there is a reference to the head and the neck and the indication "kid on dig. at time of death" with an arrow "valve open"?

> Yes. A.

And then further down on the page 0.



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there is the notation "hearts", Mr. Barber - 3 baby" and then "dig. in stomach contents Mr. Snedden - 7 p.m.".

Dr. Freedom, perhaps at the risk of being obvious, can you help me or do you have any understanding as to what that notation with reference to you in postmortem samples in the context of the other notations in this page means?

- A. Well, I have no idea whatsoever.
- Q. All right. And again, Doctor, you told me earlier that you had no recollection of having ordered a postmortem digoxin sample in the case of Janice Estrella?
  - A. Correct.
- Q. Subsequent to her death, do you have any recollection at any time of requesting that a digoxin assay be conducted on postmortem samples on any child who died on the cardiology wards?
  - A. Prior to March of '81?
  - O. Prior to March of '81?
  - A. No.
- Q. Well, as Mr. Lamek properly points out I suppose we should include the 22nd of March. Prior to the end of March of 1981?
  - A. No.
  - Q. Okay, thank you, Doctor.



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Doctor, during the course and indeed at the conclusion of Dr. Rowe's evidence in chief, he expressed his view as to the possible explanation of death in a summary fashion with respect to a number of the children about whose deaths we are concerned. I take it that you were not present for the evidence of Dr. Rowe at these hearings?

A. Correct.

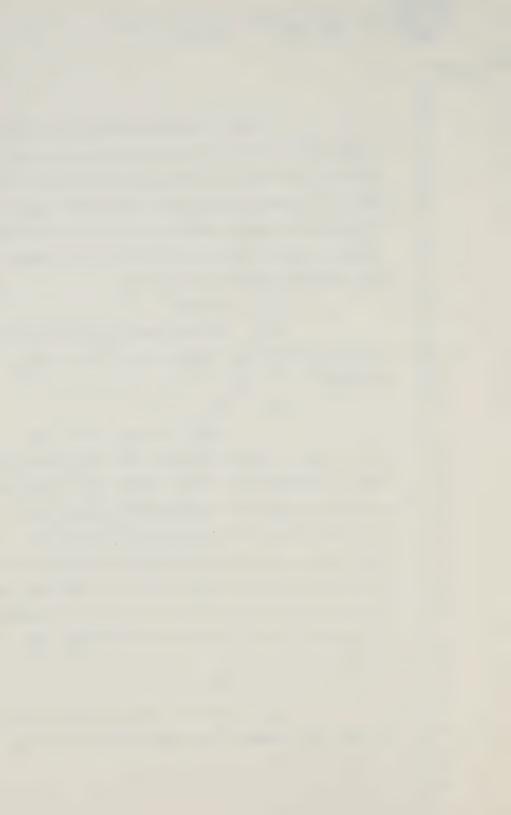
Q. Have you had an opportunity and have you reviewed the transcripts of his evidence, however?

A. Yes.

Q. Right. You may recall then,
Doctor, that Dr. Rowe indicated, and the reference to
that, Mr. Commissioner, if the matter is in issue is
at Volume 24, page 4309 and Volume 18, page 3275.
He indicated first with respect to the death of
Justin Cook that in his view unquestionably the death
was caused by digoxin intoxication. He expressed the
view that most likely it was an intentional overdose
but he didn't know. Is that a view to which you
ascribe?

A. Yes.

 ${\mathfrak Q}.$  The next child then mentioned by Dr. Rowe, Dr. Freedom, was Allana Miller. Dr. Rowe





expressed the opinion with respect to her death that the death might have been caused by digoxin intoxication, and the reference in that regard is Volume 18, page 3275 to 3276. Again, Doctor, I ask you is that an opinion with which you agree?

A. I have more concerns I think about Allana Miller. I know that she had a high postmortem digoxin level. I certainly felt back in March of 1981, and I indicated so to the police I felt that, you know, Allana Miller had been murdered. I would say that my basic understanding of what happens to digoxin has matured so much in the past two and a half years. If I recall, Allana Miller had blood in her pericardium, blood in her chest cavities which could have conceivably I would think have led to higher postmortem digoxin levels.

So, I would have some reservations today, you know, that Allana Miller's death could be explained solely on digoxin.

Q. Is the possibility of digoxin intoxication a matter that you feel should still be considered with respect to her death?

A. I would still think yes, it should be under consideration.

And the next child referred to





by Dr. Rowe in this passage of his evidence was
Kevin Pacsai. You have told us in evidence that you
had no involvement with Kevin Pacsai and you will
recall that I asked you to comment upon the indication
made by Dr. Fowler that you had been requested to
conduct to hold a pathology conference in respect of
that death. I take it of Kevin Pacsai you are unable
to express an opinion as to the likely cause of his
death by virtue of your lack of familiarity with his
death?

A. Yes, I would agree.

Q. And similarly does that apply to the death of Kristin Inwood?

A. Yes.

Q. And similarly as I understand it you had no direct involvement in the care and medical management of Jordan Hines during his life at all?

A. Yes, I was in California from the time he was admitted until after his death.

Q. Right. The next child mentioned by Dr. Rowe again in that series, Dr. Freedom, was Janice Estrella?

A. Yes.

Q. And he expressed the opinion with respect to her death once again that her death





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in his view might have been caused by digoxin intoxication and that's the same reference as with respect to Allana Miller. Is that a view that you share, Dr. Freedom?

Again, Miss Cronk, having reviewed testimony as to how Janice Estrella's digoxin was drawn post mortem, I would certainly have concerns as to the validity of those recordings. think that would be up to a pharmacologist or a pharmacokenetisist to tell us whether that number that was generated has any meaning to the situation.

And by that number, Doctor, are you referring to the, I believe it was the 72 nanograms?

> A. Correct.

Thank you. The next child mentioned by Dr. Rowe, Dr. Freedom, was Antonio Velasquez and at Volume 18, page 3275 to 3276, Dr. Rowe expressed the opinion initially that Antonio was as well a child whose death might have in his view been caused by digoxin intoxication.



Q. On a subsequent day of evidence,

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the child had sustained an idiosyncratic reaction to the drug, Naloxone, and I ask you first, Dr. Freedom, in your view, should the death of Antonio Velasquez be included amongst those children whose deaths, in your opinion, might have been caused by digoxin intoxication?

A. I certainly didn't have that

he indicated his view -- he repeated his view that

A. I certainly didn't have that consideration at the time, and as I have tried to suggest, I don't think there is anything necessarily peculiar or particular about a digoxin death in a youngster versus any other type of death.

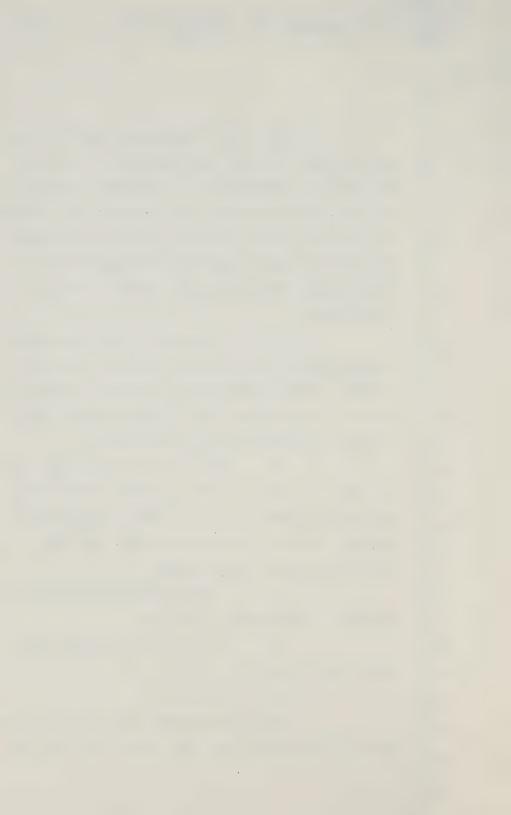
Q. Well, sitting here today, Doctor, as opposed to the view that you held at the time of the child's death, in your opinion, is the death of Antonio Velasquez a death which might have been caused by digoxin intoxication?

A. I think the way you framed that question I would have to say yes.

Q. Well, do you have some doubt about that, Doctor?

A. I'm sorry?

THE COMMISSIONER: Yes, the answer to that is yes, he does have some doubt. Is that what



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you mean?

THE WITNESS: Yes.

MS. CRONK: Q. Is it a possibility --THE COMMISSIONER: It is because you

said might.

THE WITNESS: Yes, that is correct,

Mr. Commissioner.

MS. CRONK: Q. I repeat to you, Dr.

Freedom, that it was in that language that Dr. Rowe included the child initially on the list and then repeated his view that the child had suffered an idiosyncratic reaction?

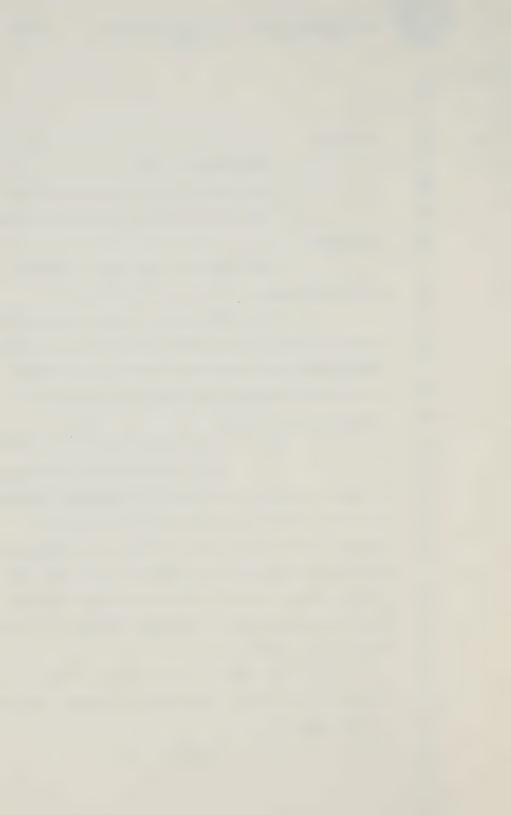
A. I would agree with that, as well.

Q. On a subsequent day of testimony,

Dr. Rowe referred to the death of Stephanie Lombardo and indicated that on the basis -- you recall we discussed this briefly this morning -- on the basis of the forensic aspects with respect to her death, he felt her death as well might have been caused by digoxin intoxication and should be added, if I can call it that, to the list.

I take it on the basis of your evidence this morning you had very limited involvement in that case?

A. Correct.



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Q. Are you in a position, Doctor,	
to offer us an opinion, your opinion, as to whether	or
not that child's death might be attributable to	
digoxin intoxication?	

A. I would think in the global concept or construct of this forum, the answer would have to be yes.

THE COMMISSIONER: That's not very helpful, though. I am afraid there is a failure of communication here.

You don't have to answer this question if you don't want to, but do you prefer the theory of digoxin intoxication to that of an anatomical disease?

THE WITNESS: No, I would much prefer, Mr. Commissioner, anatomical disease.

MS. CRONK: Q. With respect to the case of Jesse Belanger, Doctor, you did have more involvement with that child --

A. Right.

Q. -- than you had with Stephanie

Lombardo?

A. Right.

Q. Once again, on a day of subsequent evidence, Dr. Rowe testified that, having regard to the forensic aspect of that case, and





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having regard to the fact that the child had not been prescribed or, to his knowledge, administered digoxin while in the hospital, that he felt that child's death might have been caused by digoxin intoxication and again I ask you is that an opinion with which you would agree?

A. Well, subsequent to the events of March, 1981, I think we have all read about this digoxin-like material that will show up with digoxin readings as high as 4 and 5.

I don't know what the implications of that is in such a youngster as Belanger. This youngster was not prescribed digoxin; either digoxin or a digoxin-like substance was found post mortem in the tissues, so I would presume that would come under the inspection of either the Coroner's Act or this forum.

I certainly did not think that Jesse Belanger died of digoxin intoxication at the time of his death.

Q. Again, Doctor ---

MR. SCOTT: Well, again, Mr. Commissioner, is this getting us anywhere?

As I understood it, Dr. Rowe's evidence was that if you conclude that Baby Cook was murdered,



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then, he says almost any of the 36 deaths are theoretically capable of being digoxin deaths.

Now, he went on to list with the assistance of Mr. Lamek some seven where he thought - I think it was seven -- where he thought that possibility should be particularly investigated.

Now, I don't understand anybody's theory of the case to be anything different than that. Is it necessary to go through it all?

of the problems, Ms. Cronk, about this one is that, while Dr. Freedom is an expert on the anatomical condition, particularly those infants that he was dealing with, he is basing his opinions whether or not the child might or might not have been poisoned by digoxin, either accidentally or deliberately, upon other expert evidence that isn't his own.

MS. CRONK: Well, that ---

THE COMMISSIONER: Just because he has found out things about digoxin, and I don't really think it is -- I don't think it is much of a help. It may appear in the headlines or something like that, but it is not the sort of thing that I am going to find conclusive.

MS. CRONK: Well, Mr. Commissioner, I



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leave it there. I would not like to be taken, however, to agree with Mr. Scott's version of what Dr. Rowe's evidence on that issue was necessarily, however.

THE COMMISSIONER: Well, I thought it was pretty close.

MS. CRONK: Well ---

THE COMMISSIONER: He said that they thought the Cook child died by digoxin poisoning --
MS. CRONK: Well, without arguing the

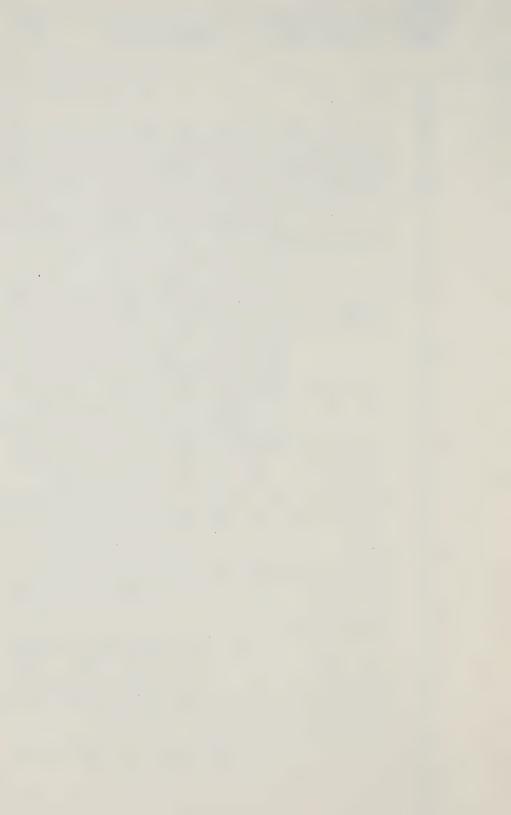
other six or seven might have.

THE COMMISSIONER: And he thought the

MS. CRONK: Well, without arguing the matter, Mr. Commissioner, my understanding of the evidence of Dr. Rowe, and this may not be the appropriate time to address the issue, my understanding of his evidence was that subject to the pharmacological evidence as to the interpretation of the levels of digoxin recorded in these children, he felt that Justin Cook's death was unquestionably attributable to digoxin overdose.

He went on to explain what he meant by that, and similarly that some seven other children, discounting Antonio Velasquez, their deaths might have been attributable to digoxin intoxication.

THE COMMISSIONER: The subtlety of





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distinction between what Mr. Scott said and now what you say I haven't got yet.

MS. CRONK: Well, in terms of Dr.

Freedom's ability to assist us this afternoon, and I recognize the time, Mr. Commissioner ---

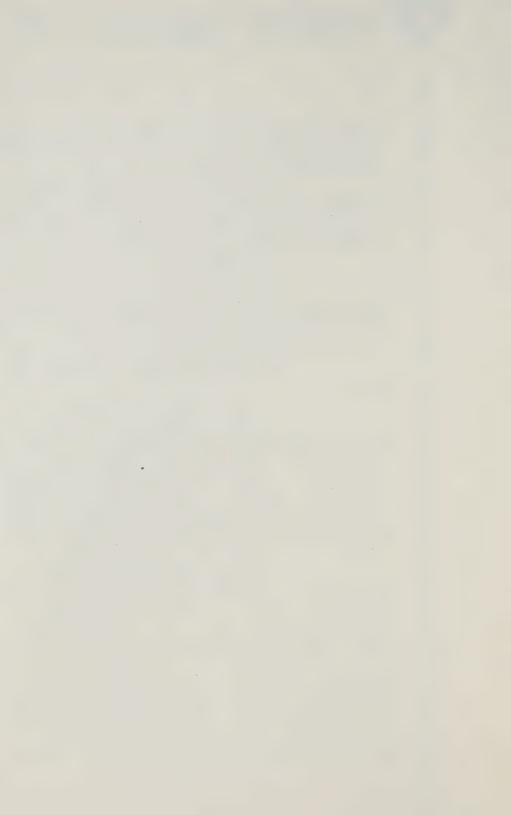
MR. SCOTT: Well -- I'm sorry.

MS. CRONK: That is the first time I have seen Mr. Scott's shoulders bowed. I don't know whether I should take some particular note.

MR. SCOTT: You can take credit for

At this stage, when I think we are in the 7th or 8th week of these hearings, is it not reasonably clear that the evidence comes down to this: if there was a murderer in that hospital, it is going to be very difficult because of symptoms or findings to determine how many babies were murdered.

Now, as I understand Dr. Rowe's evidence and I think Dr. Freedom's is the same, here is what I say about Justin Cook: if you forensic experts, and that includes your Lordship for these purposes, tell me that that is a murder, then we simply have to go back and look at the others, and Dr. Rowe said of those others there are seven that I would look at rather carefully.





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But to hammer that home incessantly doesn't advance us. We all agree to that.

THE COMMISSIONER: No, I agree. I agree with everything you have to say but I would like to put one question just to satisfy Ms. Cronk.

You have heard all of the evidence.

You have heard what Mr. Scott said was the substance of Dr. Rowe's evidence. Are there any of those children that -- well, I think you have indicated that you would have some doubt perhaps about some of them. But are there any other children that you would add to that list?

MS. CRONK: You anticipate me, Mr. Commissioner, as usual.

THE COMMISSIONER: Yes.

THE WITNESS: No.

THE COMMISSIONER: None?

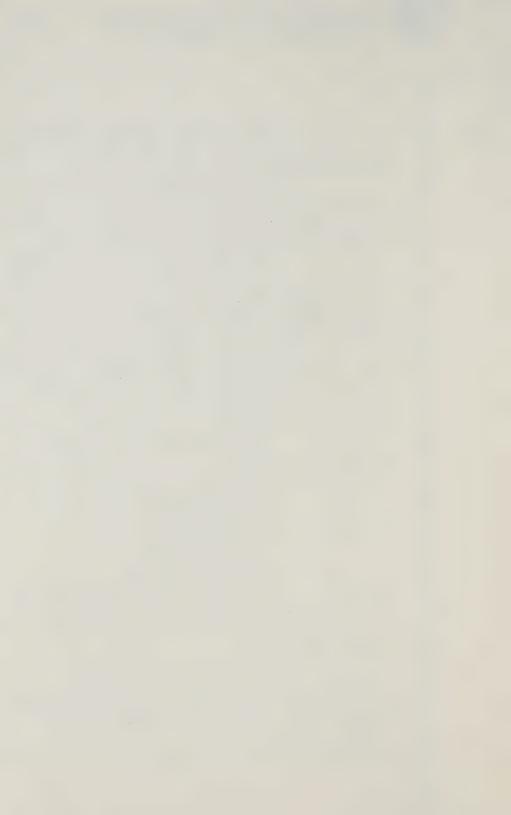
THE WITNESS: None.

MS. CRONK: Thank you, Dr. Freedom.

THE COMMISSIONER: Well, we got a nice,

brief answer to that.

MS. CRONK: Q. Dr. Freedom, one final and very brief area: based on information provided to Commission Counsel, it has been suggested that at a meeting on March 23rd, 1981, during the afternoon,



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that you attended with Sergeant Anthony Warr of the Metropolitan Toronto Police Force, and you commented to Sergeant Warr at that time that when you learned of the deaths of several of the children on the cardiology wards, you commented -- I'm sorry -- that you commented to Sergeant Warr that you had told a relative that someone was killing our babies.

THE WITNESS: That is true.

Q. Fairly, Dr. Freedom, when you are in the witness stand giving evidence, may I ask you, do you recall having made that comment to Sergeant Anthony Warr on the 23rd of March, 1981?

Yes, I do, and I said that I made the statement on March 21st, late that evening, after I had been told about the Miller digoxin level.

0. And to whom did you make that statement?

Α. I believe it was to my brotherin-law or his wife or my wife. I can't recollect. But when I was told about the sky-high level in Allana Miller I was very concerned that there was something malicious going on.

Doctor, what did you mean in 0. making the comment in referring to someone is killing our babies?



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A. Just what I said. When I wa	S
told that at that time the level had come back on	
Allana Miller which again I had thought was .9 dur	ing
the day and sky-high during the night, when I felt	-
that digoxin had been held, number one, number two	I
had been informed about Pacsai and now Estrella, I	had
visions of a problem in the hospital that evening.	

Q. Were you concerned that evening about the deaths of all three children that you have just mentioned, Dr. Freedom, or Allana Miller alone?

Well, again I had said that it was in the context of Pacsai, Miller and Estrella.

MS. CRONK: Thank you, Dr. Freedom, I have no further questions.

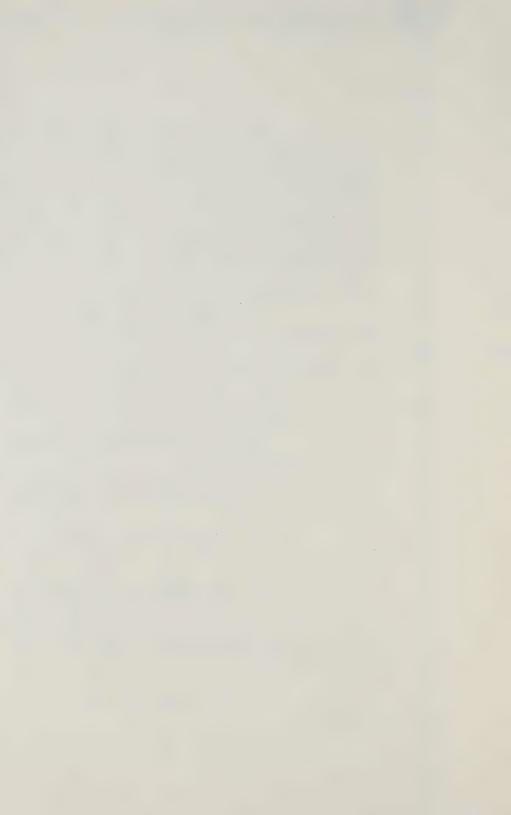
THE COMMISSIONER: Yes. Thank you. What is the time now?

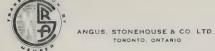
MS. CRONK: Let the record show it is twenty to four.

THE COMMISSIONER: Yes, certainly, and let the record also commend you for having completed on time notwithstanding all of my efforts and Mr. Scott's to prevent you.

Mr. Scott, you don't want to go now

MR. SCOTT: I thought Mr. Percival was.





				THE C	OMMISSION	ER:	Well,	I	don't	think
ne	wants	to	go	until	tomorrow	morr	ning.			

MR. SCOTT: He likes to get in one or two before the journals close for the day.

MR. PERCIVAL: I can think of a couple,
Mr. Commissioner, but you promised me this morning I
wouldn't be going.

THE COMMISSIONER: All right.

MR. PERCIVAL: I had lunch.

THE COMMISSIONER: All right. Well, I give you the option to start tomorrow at ten, but I also give Mr. Scott and Mr. Ortved the opportunity to speak for ten minutes if they want to tonight, and if they don't want to ---

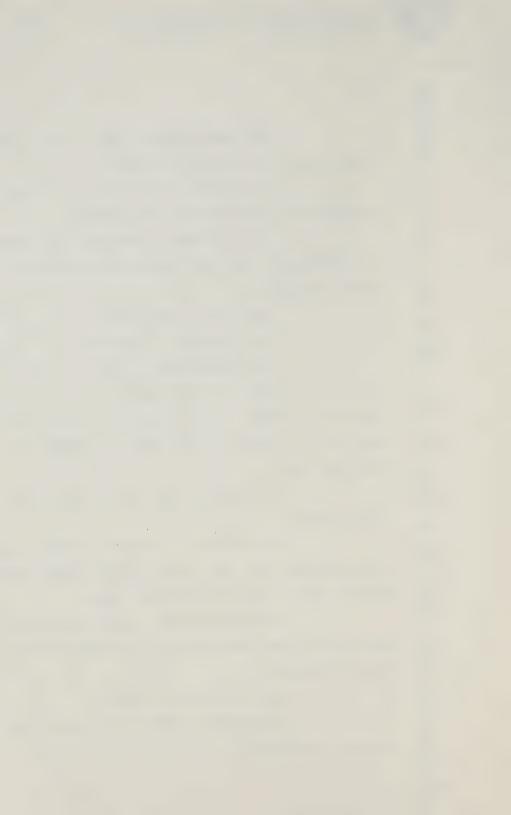
 $$\operatorname{MR.}$  ORTVED: That is an invitation I will decline.

MR. PERCIVAL: I didn't realize I have a pre-trial at 9:30, but I will get out of that and I will be here as close to 10:00 as I can.

THE COMMISSIONER: Well, if you are not here we will just start because either one of them have a right to --

MR. PERCIVAL: Oh, sure.

THE COMMISSIONER: -- to bracket you by coming in afterwards.



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MR. PERCIVAL: Either inside the Commission or outside.

MR. SCOTT: Is it Mr. Percival's idea that he would like for reasons of convenience to go first at 10:00?

THE COMMISSIONER: Well, he is worried that he might not get finished tomorrow, that is the only problem.

MR. PERCIVAL: No, no, that is not

THE COMMISSIONER: Isn't it?

MR. PERCIVAL: No, absolutely not.

THE COMMISSIONER: Then why don't we

just continue? How long do you expect to be, Mr. Scott?

MR. SCOTT: I don't know. I haven't really considered it. I think we will be quite short.

THE COMMISSIONER: Mr. Ortved?

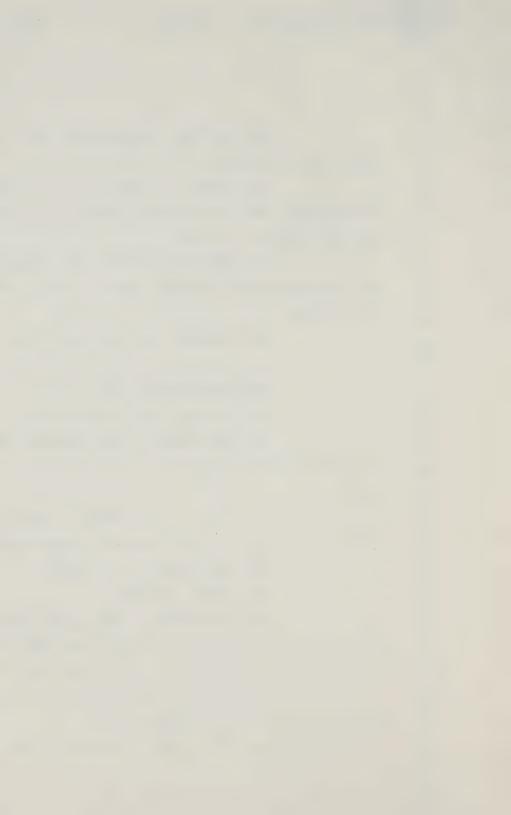
MR. ORTVED: I agree.

THE COMMISSIONER: Then I think that it might be helpful just to take them and then take you after that so you don't need to worry about your ---

MR. PERCIVAL: Well I wouldn't think

I would be more than an hour and a half.

MR. SCOTT: What I was going to do,



moderate ---



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Mr. Commissioner, and I can't do it tonight, rather than plough through Dr. Rowe's evidence and put all the questions to him (I know that at my request Dr. Freedom has read it) now what I would prefer to do is just simply put some page numbers to him and ask him if he has read that evidence and if he has any comment to make on it.

THE COMMISSIONER: I can't tell you how pleased I would be with that kind of question, yes.

MR. SCOTT: I am trying to be a very

MR. PERCIVAL: Will that continue tomorrow, Mr, Scott?

THE COMMISSIONER: In the case of an expert who clearly acknowledges he has read it, and if you say you have read what Dr. Rowe said, do you agree, do you disagree, do you have any comments, would speed things up I would think considerably.

MR. SCOTT: However, I can't do that tonight because I haven't got the page numbers.

THE COMMISSIONER: If you can't do it tonight do you want to do it on Monday, is that it?

MR. SCOTT: No, I thought I would do it tomorrow.

THE COMMISSIONER: Oh no, I thought you



event.

meant you couldn't prepare yourself tonight.

MR. SCOTT: No, no.

THE COMMISSIONER: Oh well if you can do it tomorrow that is fine. Do it tomorrow and we will take you and Mr. Ortved in whatever order you prefer and then we will take Mr. Percival after that and then we will take anyone else we can up until 4:00 o'clock, 4:30 I guess tomorrow night.

All right. We will continue in any

I'm sorry, but you are going to be back here on Monday. There is no way that we can avoid that because of the Jewish Holiday.

THE WITNESS: Okay. So it will be tomorrow then and ---

THE COMMISSIONER: Monday. All right.

10:00 o'clock tomorrow morning.

--- Whereupon the hearing adjourned until Thursday, September 8th, 1983.



